RICE UNIVERSITY

Claiming the Line: Ephemeral Boundary

by

Veronica Gomez

A THESIS SUBMITTED
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE

Master of Architecture

APPROVED, THESIS COMMITTEE

Dawn Finley
Associate Professor
Director of Graduate Studies
Thesis Advisor

Sarah Whiting
Dean
William Ward Watkin Professor

Scott Colman
Assistant Professor
Thesis Program Director

HOUSTON, TEXAS
January 2019
This thesis claims architecture (and specific forms of architectural practice) as a tool of advocacy to engage relevant political and social issues of great urgency around the world. The project critiques international border walls and the dehumanizing conditions generated urbanistically, economically, and socially through their divisive nature. Focusing on the US-Mexico border, the research identifies the (ordinary and curious) cultural activities and economical exchange that occur in and between border cities and environments altered by border walls. To address this complex political and social topic, three forms of design research and representation are used to explore, demonstrate and question political futures through architecture. This diverse set of formats—a research map, a medium-scale building and a small-scale object or piece of furniture—are independent trajectories that operate collectively, synthetically, and equally in this investigation. This thesis addresses disciplinary questions of territoriality and citizenship derived from political ideologies. Understanding national borders as spatial, programmatic transitions with nuanced potentials informs each of the three formats while illustrating the arbitrary ways in which political borders are drawn.

ABSTRACT

This thesis claims architecture (and specific forms of architectural practice) as a tool of advocacy to engage relevant political and social issues of great urgency around the world. The project critiques international border walls and the dehumanizing conditions generated urbanistically, economically, and socially through their divisive nature. Focusing on the US-Mexico border, the research identifies the (ordinary and curious) cultural activities and economical exchange that occur in and between border cities and environments altered by border walls. To address this complex political and social topic, three forms of design research and representation are used to explore, demonstrate and question political futures through architecture. This diverse set of formats—a research map, a medium-scale building and a small-scale object or piece of furniture—are independent trajectories that operate collectively, synthetically, and equally in this investigation. This thesis addresses disciplinary questions of territoriality and citizenship derived from political ideologies. Understanding national borders as spatial, programmatic transitions with nuanced potentials informs each of the three formats while illustrating the arbitrary ways in which political borders are drawn.

Family Meeting at the Border Fence, Friendship Park, San Diego-Tijuana
THICK NOTION
The research map reveals the border as an act of exclusion, the bureaucratization of
the land. Through immigration policies, the border expands its legal authority beyond
the “imaginary” line 100 miles into the landscape. To investigate this notion of a broad
or thicken border, the map identifies border patrol checkpoints —moments in which
the bureaucratic act becomes present within the territory, representing the collision
between culture and political infrastructure. There are 71 interior traffic checkpoints,
some are permanent and some are tactical, meaning they often change location to
cover more terrain to regulate streams of people entering/travelling the country.

SYSTEMS INTERCONNECTING THE TWO POLITICAL ENTITIES
At a large scale, the research map uncovers hidden or “intangible” connections
between the two political entities, identifying the (ordinary and curious) cultural
activities and economic exchanges that occur in and between cities and landscapes
altered by imposed borders.

BINATIONAL CITIES
The map identifies border cities typologies, which display complex, social and
economic relationships conditioned by the wall’s divisive and alienating nature.
Despite their economic disparities, binational border cities can be understood as
single entities due to their intricate interdependence, physical proximity and shared
cultural heritage.
US-Mexico Border Map

RSA Jury Room | Thesis presentation photographs
CALIFORNIA HOUSING PRICES DISPARITIES

In California, the map explores the conditions that have contributed to the emergence of the “trans-border residents” —individuals of US or Mexican citizenship that cross the international border to work, attend school, or shop on a regular basis. One factor for the rise of this condition is the income and housing disparities between Tijuana and San Diego. It’s estimated that the average person from San Diego earns four times more than the average person from Tijuana. Also, In San Diego, the median house price is $410,00 while in Tijuana it is $35,000.

DEATHS IN ARIZONA

In Arizona, the map shows migrants deaths. The introduction of an immigration policy called –“Prevention Through Deterrence” resulted in a shift of migration pattern. Migrants crossing the border moved away from urban areas to the Sonoran desert in Arizona; as a consequence, from 1999 to 2013 —over 2500 migrants died due to harsh conditions in the landscape.

CULTURE IN TEXAS

In Texas, the map shows the cultural ties between the two countries. In the valley area in south Texas, 85% of the population speaks Spanish as their primary language.
**SPATIAL CONDITIONS**

Political borders exclude through differentiation by articulating an edge of inside/outside, creating an inclusive/exclusive dichotomy.

For Italian philosopher Agamben, the inclusion of a territory results in the exclusion of another; such definition also coincides with notions of citizenship, which defines who-belong and who-does-not. Defining a dual understanding of the land—inside/outside—contemporary bordering practices use fences as estrangement devices to exclude specific groups of people.

At a smaller scale, the map identifies specific spatial conditions created by the border.

---

**Median House Price**

The Median House Price in San Diego is $410,000 while in Tijuana is $35,000.

**Migrants Deaths**

There were over 2,471 migrant deaths in Arizona from 1999 to 2013. Pima County Arizona comprises 9,189 sq mi.

**Border Patrol Checkpoints**

Checkpoints are located within 100 mi Patrol Zone along major highways in the US.

---

**Population Density per square mile.**

**Legend**

- US-Mexico Borderline
- Pedestrian Fence
- Vehicular Fence
- Rio Grand
- Tactical Border Checkpoints
- Permanent Border Checkpoints

---

**Mortality Rate**

There were 3,277 (15-50 year olds) deaths—any cause—in Sonora, Mexico from 1999 to 2011. Sonora State comprises 69,306 sq mi.

---

**Spanish Speakers**

The 2012 Texas Spanish Language map identifies specific spatial conditions created by the border.

---

**In San Diego, at Friendship Park, a doubling of border fence creates an interstitial space with limited access, resembling visiting hours of a prison for families to meet. Human interactions are heavily scrutinized and dehumanizing, while the layering of fence inhibits any kind of visual or physical contact.**
San Ysidro port at San Diego is one of the busiest land ports in the world; 70,000 northbound vehicles and 20,000 pedestrians cross it each day.

This condition maps the route of a high school girl that received an academic scholarship from a school in El Paso. She crosses the border on a daily basis, returning to Juarez every afternoon.
This condition shows the physical layering or thickening of the borderline as well as the scrutiny levels when entering the US reflected on the heavy traffic and long waiting times between El Paso and Juarez.

This shows a detention camp for refugee children in Tornillo, Texas.

This shows a detention camp for refugee children in Tornillo, Texas.
This maps the route for a lunch trip to a small town in Mexico from Big Bend National Park.

This condition shows the misregistration between the boundary line and the fence near Brownsville Texas, trapping a farm in the interstitial space created by the two.
The map is a critical link between the research, the building and object. It is a design enabler; all these extracted spatial conditions found in the research are instrumental for the design of both the building and the object. The building is a compression of these idiosyncratic moments, embodying the spatial and performative aspects of those conditions. The Building materializes the interconnected relationship between the two political entities, illustrating both the tension and negotiation.

Data Collection Center Site Plan | San Luis, Arizona & San Luis, Rio Colorado, Sonora Mexico

Plan & Sectional Diagrams
PROGRAM
The program has a social dimension— the building is a data collection center that catalogues oral histories through audio recordings and written transcripts. It is located on the border of San Luis in Arizona and San Luis Rio Colorado Mexico, occupying the interstitial space between a double fencing.

DESIGN
The design of the building embodies the dual character of the border to highlight the difference and unbalanced nature of the two sides by articulating the building as two different volumes. First, on the south side, a collective rectangular box running along the border defines the space. The north side of the building is composed of a set of a repetitive form merged together. The sectional articulation of the building creates dynamic visual fields. From the south, the building appears as a fence from far, but from close the building reveals itself.

CIRCULATION
The entrances to the building are biased: from the north multiple entry points are at ground level and slightly obscured at a diagonal while from the south the ground surface dips below the building envelope, such that people slip under the building to access the interior. At the interior the discrete reading of the two-façade volumes dissolves into a single open space where people from either side come together. The circulation is defined by interdigitized spaces to break the scale of the large volume; and the building’s the primary material— fabric — creates an immersive spatial effect.
Juan recalled from his own experience, would be easy compared to the difficult, treacherous journey across the length of Mexico. He knew his son had experienced the same kind of pain in his heart. He gave his mother a quick squeeze and turned away, unable to linger on the tears streaming down her face. He stroked her hair and pecked her on the cheek, his lips coming away salty from the tears streaming down her face. He ached to stay. But he was eager to begin the long journey to meet his dad—part of a mass migration of unaccompanied children who crossed the border that year in 2014.

For the past few years, Armando had been the man of the house, trying to provide for his mother, Maria, and Liliana, his little sister. In 2010, his father, Juan, left their rural village in the lush, mountainous hills of northwestern Guatemala with a plan: He would spend no more than eight years in the United States, working and saving every penny he could for his eventual return to Xoxtac. His wife got through each day, then each year, believing the day would come when and if they would ever be reunited again.

The pressure to work and make money threatened to crush Armando’s dream of continuing his education. So last year, on January 20, he adjusted the straps on a worn-out backpack filled with a few belongings, intent on following in his father’s footsteps. He gave his mother a quick squeeze and turned away, unable to linger on the tears streaming down her face. She begged him in Chuj Coataneco, their indigenous Mayan dialect, not to leave, to stay just one day longer. The family room Armando suddenly understood must seem to her. He stroked her hair and becked her on the floor. They sat silently from the tears streaming down her face. He gave his mother a quick squeeze and turned away, unable to linger on the pain she saw in her eyes. He had to leave, to follow with the 13-year-old sister. She begged him in Chuj Coataneco, their indigenous Mayan dialect, not to leave, to stay just one day longer. The family room Armando suddenly understood must seem to her. He stroked her hair and becked her on the floor. They sat silently from the tears streaming down her face. He gave his mother a quick squeeze and turned away, unable to linger on the pain she saw in her eyes. He had to leave, to follow with the 13-year-old sister.

The framed poster of glimmering New York City hangs on the drab wall of a cinderblock home. Armando’s backpack filled with a few belongings, intent on following in his father’s footsteps. He gave his mother a quick squeeze and turned away, unable to linger on the tears streaming down her face. She begged him in Chuj Coataneco, their indigenous Mayan dialect, not to leave, to stay just one day longer. The family room Armando suddenly understood must seem to her. He stroked her hair and becked her on the floor. They sat silently from the tears streaming down her face. He gave his mother a quick squeeze and turned away, unable to linger on the pain she saw in her eyes. He had to leave, to follow with the 13-year-old sister.
Both the Map and the Building deal with architectural terms of thresholds occupying its thickness, redefining it as a broad zone that mediates the two conditions found on either zone of the border. Similar to the building, the Bureau at a smaller scale formalizes spatial conditions derived from the research map.

Twin Bureau informs and provokes an understanding of the synthetic spatial conditions and effects produced by border walls at an intimate scale through a direct, almost scripted interaction.

The desk, a symbolic and pragmatic object in the workplace, operates as a boundary to claim and delimit a space for a specific function, isolating the subject through exclusion from her/his context. Twin Bureau uses the partners' desk as a speculative tool to instigate a moment between two people who are both joined and separated.

**Bureau**

*Noun*

1. a chest of drawers, often with a mirror at the top.
2. a division of a government department or an independent administrative unit.

*Origin*

French: desk, office, originally a kind of cloth (used to cover desks), Anglo-French, Old French burel, equivalent to bu- (variant of Late Latin burra wool, fluff).
JOINED & DISJOINED

The scale of the Bureau initiates a dynamic engagement between the subject, the object, and the environment (or context). The Bureau is articulated by two independent parts, which can be connected to operate as a single object. When unified, the Bureau emphasizes the subjects “working” on the desk. When separated into two pieces, the Bureau emphasizes on its context.

Twin Bureau is a solid–wood–structure wrapped in a sheer–fabric–surface. The two materials are in constant negotiation; the fabric is either tight or loose fitted to the wooden frame. On the bottom part, the fabric is tight to the object and uses it as a structural element. On the top part, the fabric is indifferent to the object; it has its own agenda and produces a pocked space that performs different.

BUREAU JOINED

When the bureau is joined, the reading of the objects is more ambiguous; the differentiation of the two blurs. In this mode, the object becomes more stable, defined by what holds it together and adding to a greater self.

BUREAU DISJOINED

When the two sides come apart, the geometry of the object operates in a different manner.

INTERSTITAL SPACE

The desk defines a thicken threshold between the two disconnected objects, revealing a soft edge articulated by a fabric effect.
This thesis manifests at three scales each with implicit limits, potentials, and experiences. The material sensibility of each of these techniques provoked me to work on all three as a means to understand the project at three different scales. Contrasting the absolute abstraction of the border as a line, these three designs capture the border as an ephemeral and two-sided condition. This thesis understands the borderline as a dynamic ever-changing phenomenon instead of an immutable or immobile line that divides and separates.

This research thesis offers a model for how we can approach complex social and political problems in relationship to political infrastructure. Presenting the border between two political entities—the United States and Mexico—as a region in which complex economical, social, cultural and natural systems interconnect.

CONCLUSION
REFERENCES


