

**Secret Spaces and Human Traces:  
Border-Crosser Architecture in the Sonoran Borderlands**

by

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## **Dedication**

To everyone who has lost home.

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## **Abstract**

This dissertation contributes to the discourse of informal and temporary architecture through its investigation of the small structures constructed by unauthorized border-crossers (UBCs) in the U.S.-Mexico borderlands. Scholarship tends to frame self-built environments as a cultural phenomenon (as traditional vernacular architecture), a by-product or response to capitalism (as marginal spaces of resistance such as 'slums'), or an artistic endeavor (such as pop-up architecture or guerilla urbanism). I argue that UBC structures, in their response to extreme situations, constitute illustrative microcosms through which we can view the larger relationship among the realms of architecture, politics, experience, and environment.

During the early 2010s, the Tucson sector of the U.S.-Mexico border was the most highly trafficked area with UBC annual apprehension rates of around 120,000. This condition was a result of late 1990's policy initiatives legislated by the United States government that fortified urban points of entry and strategically funneled UBCs into brutal desert terrain. Now, to cross the border, UBCs have to walk an average of three to five days through the Sonoran Desert, facing violence, harmful plants and animals, relentless terrain and climate, as well as Border Patrol surveillance. During their journey, some UBCs build small structures out of available materials such as mesquite branches, grasses, and rocks.

This research project analyzes these seemingly simple structures and identifies three ways in which they negotiate the complexity of the border-crossing context. In order to elucidate the relationship between this architecture and the everyday experiences of border-crossers within this hostile natural and political landscape, the research is framed theoretically by three schools of thought: structuralism, phenomenology, and critical theory.

First, through structuralism, I identify the ways in which often-shifting social roles and rules impact the siting and form of the architecture border-crossers build. The nature these structures underscores the ambiguity within this landscape, including how border-crossers must adapt their identities, bend rules, and reorder priorities. Second, I employ phenomenological theory to highlight the extent to which the structures provide physical and existential shelter from the traumatic context of border-crossing, revealing that while architecture can provide some respite, complete refuge is impossible to achieve. Thus notions of place and dwelling are enmeshed with struggle and survival. Finally, I deploy critical theory to identify the modes through which UBC architecture resists the militarized landscape, engaging direct strategies such as counter-surveillance and cloaking as well as indirect tactics of persisting and haunting what is intended to be a no man's land.

To investigate these dynamics, I completed two seasons of fieldwork in 2012 and 2013 on both sides of the U.S.-Mexico border. Incorporating inter-disciplinary methods from architecture, archaeology, and anthropology, I gathered and analyzed over 30 exemplars of border-crosser architecture, several hundred of their associated artifacts (such as discarded clothing and food containers), and over 40 in-depth interviews with

UBCs. The aim of this work is to bring UBC structures out of the realm of anonymous cultural artifact or thoughtless construction and instead to reveal the intricacy, intimacy, and individuality of each structure as it responds to and shapes the border-crossing process.



## Chapter 1 Introduction

In times of great upheaval, trauma, and conflict, we seek shelter. Often, during crisis, professional architects are notably absent and people build for themselves. The informal architecture vulnerable people create can help in transcending, surviving, or escaping the confines of difficult circumstances. We commonly did this as children when we built forts and sought out hiding places in times of familial conflict or violence. We do this as adults through artistic spaces or refugee encampments when we respond to pressures on our mental health or natural disasters. In their response to extreme situations, these structures constitute illustrative microcosms through which we can view the larger relationship among architecture, politics, experience, and environment. These are essentially architectures of emergency.

Walter Benjamin, in his *Theses on the Philosophy of History*, states that, “The tradition of the oppressed teaches us that the ‘state of emergency’ in which we live is not the exception but the rule” (Benjamin 1968, 257). According to him, we are constantly in a state of emergency and that continuity, homogeneity, and progress are nothing but an illusion manufactured and maintained by those in power. In fact, Benjamin urges the historian to not only recognize but also to create a state of emergency so that Fascism cannot prevail - so that conflict and oppression cannot be rendered invisible. Over centuries, architecture, too, has been criticized for maintaining the status quo, of leaving those in a state of emergency behind, and of erasing any

element of danger. Not only are there many instances of architecture that arise out of emergencies, but those same forms of architecture work to highlight and manifest those conflicts.

The cultural complexities of an architecture that lies outside of the purview of the architectural profession has been taken to task by various scholars. Drawing from the radical politics of the 1960s, the 1990s and 2000s saw a group of architectural scholars shifting their efforts from writing on institutional buildings to examining informal places made by so-called marginal populations. Villagomez identified a typology of “residual space” as “spaces between, spaces around, rooftops, wedges, redundant infrastructure, oversized infrastructure, void spaces, and spaces below” (Villagomez 2010). These spaces then are reoccupied, recoded, and rebuilt. There are is a wide and varied body of architecture and spatial practice which falls under this descriptor.

Informal spaces often arise as an adaptation to unwelcoming climes, whether it comes out of a conflict brought about by religion, nationality, age, or other social standings. The American homeless find urban sites in which to either cache their belongings or set up temporary shelters (Zimmerman, Singleton, and Welch 2010). Immigrants create “diasporic domesticities,” bringing belongings, aesthetics, and rituals from their mother country into their new houses in foreign lands (Boym 1998). In the way skateboarders use features such as curbs, walls, benches, and ramps, they insert fluidity and flexibility into otherwise stiff and controlled urban spaces, recoding architectural elements (Borden 2001). Orthodox Jews string wire between poles in order to demarcate an *eruv*, a religious sanctification of public space (Watson 2006). Unused spaces are taken over by artistic “insurgent spaces” displaying decaying kitsch

(Gendelman, Dobrowolsky, and Aiello 2010). Latinx communities in Los Angeles transform their yards and neighborhood streets into informal markets (Crawford 1999). Unoccupied spaces such as empty lots or junk yards are used as “adventure playgrounds,” play space for neighborhood children in which they form their identities and cultivate their imagination with less rules and restrictions (Hayward, Rothenberg, and Beasley 1974). In these ways, people have intervened into physical space in a way to transform it better to their needs.

In order to investigate the ways in which architecture built by inhabitants and lay people (instead of professional architects) negotiates complex (and often brutal) circumstances, this dissertation project looks at the small, informal works of architecture built by unauthorized border crossers (UBCs) in the Arizona borderlands. The small shelters are usually made with nearby available materials in the desert: mesquite or cacti, rocks, and thatched with grass. While at first glance the structures are simple and rudimentary, their unique siting and form help mitigate a treacherous natural environment as well as the technology and tactics of Border Patrol.

### **The Border Context**

The U.S.-Mexico border began to take shape in 1848 after the Mexican-American War. Via the Treaty of Hidalgo, the U.S. took over 50 percent of Mexico’s territory, including what is now Arizona. The Gadsden Purchase of 1853 further pushed the national and Arizona state boundary south. After a succession of land surveys, the border was made material with the erection of markers, some of which were rock cairns, others were marble spires. By the 1890s, a 60-foot easement was established along the border and all structures that straddled the border were removed. The boundary

markers were made more visible and permanent, made out of iron and standing six-foot tall. A few hundred smaller concrete markers were added along the border over the years (Dear 2013). Over the post-war years, the border morphed from a chain-link fence topped with barbed wire to steel posts reinforced with horizontal bars of sheet metal. Slowly the border became as material a division as it was symbolic.



Figure 1.1 The border wall in Nogales in 2012. At left, the wall straight-on with Nogales, Sonora, Mexico visible through the slats. At right, the wall stretching East separating the U.S. (left) from Mexico (right).

Throughout the 1990s and 2000s, the border fence was rearticulated as a wall, made taller, longer, and reinforced with surveillance technologies and an increase in

Border Patrol agents (McGuire 2013). Operation Safeguard was signed by the Clinton Administration in 1993, authorizing the fortification of urban points of entry in Arizona. In Nogales, after years of public debate (Brooks 1993b, a), a chain-link fence with sheet steel was replaced by a concrete wall a few blocks long in 1997 (Lopez 1997). In 2011, a slatted fence made from Vietnam-era scrap steel was erected [Figure 1.1]. The physical fortification of the border had many effects. For one, it has negatively affected the Tohono O’Odham whose nation’s territory was already cleaved into two by the national border and now with further enforcement cannot freely move back and forth to obtain water or visit family (Tohono O’Odham Nation 2017)<sup>1</sup>. The addition of fencing and walls has also had disastrous environmental impacts like urban flooding and disrupted wildlife migration (Lasky, Jetz, and Keitt 2011, McCombs 2008). Of course fencing, walls, and policy have also affected U.S.-Mexico migration.

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<sup>1</sup> For further discussion of the impact of the border on the Tohono O’Odham and the quest for patrimony (land claims and free movement across the border) see (Cadava 2011).



winter months, nighttime temperatures routinely drop below freezing while days are around 60 or 70 degrees (NOAA Regional Climate Centers). The topography of the Arizona borderlands is equally extreme and variable, ranging from 100 feet above sea level in the desert valleys to the peaks of Atascosa (6,440 ft.) and Baboquivari (7,734 ft.) across various mountain ranges. Whether in the sandy flatlands or in the steep rocky mountains, one is frequently surrounded by venomous animals such as scorpions, spiders, centipedes, and rattlesnakes as well as by prickly mesquite shrubbery or cholla cactus [Figure 1.2] (Phillips and Comus 2000). As most border-crossers currently spend an average of three to five days crossing the border, the high temperatures, difficult terrain, and dangerous flora and fauna have dire consequences for border-crossers such as dehydration, dissolution of skeletal muscle, and elevated white blood cell count (Wong, Hsu, and Carr 2015).





Figure 1.3 Four examples of different borderland terrain as documented during fieldwork.

Aside from a few small towns, the city of Nogales, or the Tohono O’Odham reservation, much of the land is public with the Buenos Aires National Refuge being west of Nogales and the Coronado National Forest being east. These areas boast a dynamic range of flora and fauna, yet the biodiversity and wide range of terrain and ecosystems in the Arizona borderlands [Figure 1.2] can make it particularly difficult to anticipate the conditions in which one might find themselves. A “violent” monsoon season lasts from July to August (National Park Service 2017) which means people can become soaked during a flash storm and become quite cold at night. Socks that become wet can also increase the likelihood and severity of foot blisters. Intense precipitation changes the landscape rapidly, erasing footsteps, moving objects, and



causing near-overnight growth of flora. As experienced during fieldwork, this can make a familiar path appear entirely foreign, even when well-acquainted with an area. Thus the changing climate and landscape can contribute to injuries and disorient border-crossers as they traverse the land.



Figure 1.4 A Border Patrol checkpoint on I-19, heading North from Nogales, Arizona. Other smaller checkpoints exist along rural roads.

If these obstacles were not onerous enough, there is also the matter of Border Patrol. There are checkpoints as far as 50 miles North from the border where Border Patrol agents ask questions, request identification, and search vehicles [Figure 1.4]. The borderlands are also rife with helicopters, ATVs, SUVs, infrared cameras, and other forms of surveillance and interception. In addition to Border Patrol and military units, there are also sometimes armed lookouts, defending and assisting the smuggling of

drugs or *bajadores* (bandits who attack and rob anyone, including guides or migrants, in the borderlands). Border-crossers face a militarized landscape, replete with technologies, weaponry, and violence.<sup>3</sup>

Enhanced border security and greater risks crossing in difficult terrain have nevertheless done little to curtail unauthorized migration – instead, the primary driver for Mexicans deciding to cross are U.S. labor demands and ties to migrant networks (Massey, Durand, and Pren 2014). In addition, whereas it was once highly circulatory (people would cross the border, work in the U.S., then return to Mexico), after policy changes since the 1990s, more people have opted to settle in the U.S. with their families to avoid the higher cost and risk of crossing (Massey 2015).

The border context, whether environmental or social, can be quite foreign to first-time border-crossers. About 50 percent of Mexican national border-crossers originate from humid and tropical southern regions and only nine percent come from arid or semi-arid northern regions (Martínez et al. 2017). About 15 percent of apprehended border-crossers in 2012 and 2013 were other-than-Mexican apprehensions (United States Border Patrol 2013, 2012), many of whom are fleeing Honduras, El Salvador, and Guatemala (Musalo 2017). Nevertheless, migrants can overcome obstacles, such as unknown terrain and climate, by hiring a guide or *coyote*<sup>4</sup>, capitalizing on social capital like acquiring knowledge about crossing from friends or family, or increasing human capital through repeated crossing attempts and building on prior experience (Singer and Massey 1998). On average, migrants have a mean of 4.7 crossing attempts (Martínez

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<sup>3</sup> For more discussion, see literature review chapter as well as refuge and resistance chapters.

<sup>4</sup> For in-depth discussion of migrant relationships with and employment of *coyotes*, please see David Spener's ethnography of Texas border-crossing (Spener 2009).

et al. 2017) and cross with a guide about 70 percent of the time (Martínez et al. 2017, Singer and Massey 1998).

For the purposes of this dissertation, border-crossers are those who have crossed the U.S.-Mexico border without going through a port of entry and without documentation. This includes migrants, drug mules, guides, points, and anyone who overlaps these groups<sup>5</sup>. As overviewed above, UBCs contend with a great many obstacles. During their trek across the border, some build structures out of nearby available desert materials. This dissertation aims to reveal some of the ways in which the structures interface with the border-crossing process in emerging from the context as well as intervening in it.

### **Research Questions and Approach**

In its form, border-crosser architecture is essentially a hut, perhaps one of the simplest physical forms of architecture. It emerges out of a dynamic socio-cultural context, mediating ecology, power dynamics, and trauma. As such, these structures can serve as an illustrative microcosm through which we can view the larger relationship between architecture, politics, body, and nature in more typical socio-cultural conditions in a broader context. With that in mind, this dissertation asks the question: To what extent does self-built architecture effectively intervene in the borderlands? As the modes and effects of architectural intervention are manifold, the following research sub-questions focus the investigation into three themes: role, refuge, and resistance:

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<sup>5</sup> For more discussion regarding social roles and rules, see Chapter 4.

1) *To what extent can border-crosser architecture elucidate the relationship between social roles, social rules, and architectural form?* This question looks at how border-crosser architecture expresses the identities of border-crossers and how that influences the use of space.

2) *In a time of uncertainty, temporary passage, and danger, what is a border-crosser's relationship to the architecture they build as a site of refuge?* This question aims to investigate to what extent shelter can provide and deny comfort and safety in a traumatic landscape.

3) *In what ways can architecture built in opposition to power have the agency to resist the context which created it?* This question asks to what extent can self-built architecture function as an agent of resistance in a militarized and contested landscape.

These research sub-questions are addressed by turning to a hybrid of theoretical frameworks. Yet each question is best investigated by a specific school of thought. For example, the question of social roles and identity in relationship to space lends itself to structuralism as employed in the field of environmental design research. David Canter's model of purposive place (how one's aims and social identity relate to one's relationship to place (Canter 1983)) helps frame an investigation into the ways in which border-crosser architecture reflects and shapes the identities and activities of border-crossers at a social group level.

The question of refuge predominantly works within and through phenomenology. Traditional phenomenological approaches to space often focus on the positive connotations of space (Tuan 1975, 1986, Relph 1976, Kaplan 1987, Ingold 1993). In these instances, nature is also positively valued, built upon terms of Heideggerian *dwelling*, where the body, self, and nature make and remake one another harmoniously. However, framing the borderlands solely through *dwelling* does not engage with the hyper-political landscape of the border which is militarized (Dunn 2001), racialized (Heyman 2009), and territorialized by cartels and various other border-crossing actors (Slack and Whiteford 2011, O'Leary 2009, Spener 2009). Thus this dissertation does

work to complicate the notion of refuge and dwelling by stressing the ways in which dwelling is always subject to everyday threats and realities.

The last question of resistance employs a critical theory framework in order to criticize and understand the ways in which power structures work within the borderlands and how border-crosser architecture can function as an everyday form of resistance.

By pairing each sub-question with a school of thought, taken together all three chapters aim to incorporate the strengths of all three frameworks. Structuralism can unearth the patterns of on-the-ground roles and rules that critical theory may overlook with its broad focus on political and invisible forces. Phenomenology can likewise fill in the gaps that the critical theory focus on institutions and abstract power structures leave unexplored - such as the everyday experiences of negotiating trauma and the unfamiliar. Critical theory can fill in the gaps that phenomenology and structuralism leave by speaking to the cultural forces of displacement, oppression, and violence that *dwelling* and *purposive place* omit. This case study thus marries the three theoretical frameworks into a more holistic analysis in order to reflect the extremes of border-crosser architecture in its various responses to social dynamics, emotional landscapes, and political conflicts.

Just as this dissertation's theoretical framework draws from various schools of thought, so, too, does its methodology draw from various disciplines, namely: architecture, archaeology, and anthropology. A mixed methods research design of tactics for data collection and analysis allows for an acknowledgment of multiple meanings, uses, and materialities of border-crosser architecture and works to find a relationship among materiality, culture, and personal experience. This dissertation is

situated under the umbrella of the Undocumented Migration Project (UMP). The UMP, founded and led by Dr. Jason De León, is a long-term anthropological study of undocumented migration between Mexico and the United States that uses ethnography, archaeology, and forensic science to better understand this clandestine social process.<sup>6</sup> While this dissertation's scope is bounded by border-crosser architecture, it also employs archaeological and anthropological data gathered for, and in part funded through, the UMP, as well as UMP methodology, in particular with regard to artifact interpretation and interview locations and techniques. Fieldwork was completed in the summer of 2012, the spring of 2013, and the summer of 2013. From UMP surveys of migrant trails and surrounding areas, I found and documented 60 works of border-crosser architecture over 25 sites with over 600 structure-related artifacts. Under Dr. De León's IRB, I conducted interviews of 31 men and 10 women in the Mexican towns of Nogales and Altar about their border-crossings.

Through a cross-disciplinary mode of study, this dissertation aims to present the shelters border-crossers build as a unique manifestation of architecture. These structures are not born from self-assured and playful radicalism found in politically boisterous projects such as those of Archigram or the recent projects of guerilla urbanism. Nor are the structures reminiscent of the informal settlements of so-called slums where people are visible and stay in one place, albeit not legally. Border-crosser architecture is still potent with need and desire, invisibility and survival, marginality and power struggles. This is a different kind of informal architecture - it neither consciously

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<sup>6</sup> Please see <http://www.undocumentedmigrationproject.com> for further information.

rebels nor folds under opposing forces. While border-crosser architecture changes without human agency (with winds it falls apart, with water it decays, other animals inhabit and rearrange it), it is still very much formed by exigent external circumstances like politics and territories. The structures built by UBCs mitigate the brutality of the desert, enable new and foreign social relations, and facilitate avoidance of detection or capture. Within their walls are the political, physical, and inner lives of the UBCs who inhabit them.

### **Organization of Dissertation**

The following chapter, Chapter Two, discusses the research design, methods, and tactics of the project, setting up an inter-disciplinary case study employing architectural site and tectonic analysis, archaeology of the contemporary, and ethnography. Architectural design has often been criticized for relying on abstract geometry instead of lived experience (Dovey 1993) and for neglecting the pre-existing conditions of sites by assuming a *tabula rasa* (Burns 1991). Using archaeology, ethnography, and spatial analysis, this dissertation undertakes an on-the-ground engagement with architectural context adding in the inhabitants' valuable perspective that often lies outside the architect's profession, training, and even personal value system (Cuff 1991). Architectonic documentation can add the spatial and physical details such as aesthetic form, a structure's response to climate and site, attention to material and construction methods, and proportion to body (Groat and Wang 2013).

Chapter Three provides an overview of the literature that frames this dissertation's questions. It lays out a section for each of the three research sub-questions themed on role, refuge, and resistance. Through the theoretical framework of

structuralism, the role section introduces how identity, social role, space, and architecture have been discussed in anthropology and architecture. The refuge section focuses on how trauma, home, and sensory experience have been discussed through the phenomenological school of thought. The last section, themed on resistance, reveals how power and politics have defined contested terrains through the lens of critical theory.

Chapter Four is dedicated to probing the first research sub-question: To what extent do social roles dictate or form the experience of, access to, and form of architecture? There are different populations that inhabit the borderlands for various purposes. These include coyotes, bandits, migrants, drug smugglers, Border Patrol, humanitarians, researchers, and local residents (miners, ranchers, hikers, hunters, etc.). The most commonly researched relationships in existing literature are those between migrants and Border Patrol agents (Falcon 2001, Heyman 2009), coyotes and migrants (Spener 2009), and drug mules and migrants (Slack and Whiteford 2011). These mostly focus on relations before or after the actual crossing such as during a Border Patrol encounter, in preparation to cross, or after arrival to the States. Some literature focuses on the social structures or relationships that form during the crossing itself and the various dangers migrants face (e.g. sexual assault) (Simmons, Menjívar, and Téllez 2015, Parson and Heckert 2014, Ferguson, Price, and Parks 2010, O'Leary 2009, Falcon 2001). This dissertation's research question aims to provide further depth and breadth regarding the ways in which various populations interact in the desert during crossing; and to evaluate the multiple ways in which space, place, and architecture are active in constituting some of these social relations. Largely working through the



structuralist school of thought via the lens of environmental design studies, this chapter focuses on how architecture's form and function mediates/enables/curtails the social roles of border-crossers including: identity (gender, citizenship, religion), purposive role (migrant, guide, mule), and hierarchy (power and access).

Chapter Five takes on the question: How do structures elucidate the multidimensional qualities of refuge for border-crossers? Although the structures in the desert are the result of an extreme and unique context, they also have broader implications for our understanding of space and architecture. Self-built and self-discovered sites of refuge speak to our simultaneously nostalgic, existential, and pragmatic relationship to architecture whether that be a yearning for a return to Eden, a desire to transcend our current condition, or a realized intervention into our seemingly powerless lives. These desert structures highlight the ways in which vulnerable people take and make shelter in order to transcend, survive, or escape the confines of their lives. Largely working through the phenomenological school of thought, this chapter focuses on the role of architecture as a place of refuge underlining themes of rest/unrest, restoration/death, and domestication/wilderness.

Chapter Six asks: In what ways do these structures, in the geography of the borderlands, illuminate the contested nature of space and place in the everyday experience of lived environments? An investigation of border-crosser architecture, as one of the simplest physical forms of architecture, can reveal how any and all built environments are contested and negotiated thereby reflecting some of our greatest needs. The structures are 'marginal spaces' in so far as they are physically sited in the borderlands and are thus on the outskirts of Mexico and the United States; and they are

culturally marginal as they are built by those without institutional backing (such as a professional architect) or legal right (such as citizenship, building permit, or land claim). Largely framed within the critical theory school of thought, this chapter focuses on the role of border-crosser architecture in a contested landscape underlining themes of, transgression/oppression, nomadism/territory, self/other, and informality.

Chapter Seven concludes the dissertation. It interprets the intrinsic value of the findings in terms of the specific relations of people, environment, and culture in the borderlands. This analysis thereby situates architecture between a rooted, ritualized, transcendent, and positively valued territory and an ephemeral, nomadic, everyday spatial practice and artifact of supermodernity. It also posits the value of the research on the broader instrumental level of case study, highlighting the inherent principles of architecture in relation to borders and boundaries and the ways in which built environments become foci for socio-political-cultural processes. It interrogates the ways in which architecture is controlled and influenced by power structures and opportunity as well as its balance between survival vs. leisure and aesthetics. And lastly it looks at nomadic 'illegal' architecture and its strengths and weaknesses relative to formal architecture.

## **Chapter 2 Literature Review**

In order to address the various complexities of border-crosser architecture, this dissertation asks three sub-questions focusing on: 1) social roles and rules, 2) physical and existential refuge, and 3) socio-political resistance. To contextualize these research questions, this chapter presents an overview of literature from a variety of disciplines and fields and is broken into three sections corresponding to the themes of the research sub-questions: 1) role, 2) refuge, and 3) resistance. Each chapter section discusses scholarship that both directly relates to border-crossing and generally ties in with space and architecture. The sections also present each school of thought best suited to explore each research question's theme: 1) Structuralism (often employed by environmental design research) focuses on the interaction between people's identities, goals, behaviors, and physical environments, 2) Phenomenology, in its focus on the depth of multi-sensory experience and existential meaning, can reveal the subjective aspects of refuge. 3) Critical theory focuses on power structures which emerge from a macro-level of politics and culture, thus lending a more politically charged and intersubjective lens to conflict and the counter-strategies of resistance.

### **Role: Social Role and Identity**

In that the border is a national division, much of its work has to do with defining who belongs on which side. Those who are not authorized to be in the United States are

thus termed “illegal” and their very identity hangs on this marker. The ‘illegal immigrant’ occupies a precarious position as they are not afforded any of the supportive systems offered by citizenship, yet are still subject to the punitive rules of the state and are offered jobs in order to sustain and stimulate the nation’s economy (Chavez 2007). Since, “The illegal alien is someone who is officially out of place in a space where she or he does not belong” (Nevins 2005, 11), there is thus an intimate relationship between both the spatial and social position of the border-crosser.

United States policies work to craft the liminality of border-crossers both spatially and socially. In 2008, the United States government launched the Alien Transfer Exit Program (ATEP). Instead of deporting migrants directly across the border, ATEP deports certain migrants (healthy young males deemed to be traveling alone) to other ports of entry across the border. For example, a man detained near Tijuana could be deported to Nogales. This funnels immigration east and into southwestern rural terrain. ATEP’s official intent was to “disrupt the efforts of transnational criminal organizations” (U.S. Customs and Border Protection 2011) by preventing migrants from reuniting with their guides at the same port of entry in Mexico. While the rhetoric attempts to focus on protecting the migrant and punishing “criminal organizations,” in fact, ATEP further puts migrants in danger. When migrants are deported to unknown cities, they lose their social ties, economic resources, are more vulnerable to robbers and exploitative *coyotes*, and then must cross in the harsher terrain of the Sonoran Desert (De León 2013a). The unauthorized border-crosser is thus physically *and* socially displaced through policy.

The social relations of those not directly involved with border-crossing are also influenced by border processes and policies. On the Tohono O’Odham reservation, the increase of rural border-crosser traffic has put a strain on many aspects of life on the reservations, ranging from concerns of personal safety, to involvement in the drug trade, to dealing with unwanted “invaders” such as Border Patrol agents (who complicate reservation sovereignty) and humanitarian groups (who leave behind water bottles further littering the landscape) (Madsen 2007). During fieldwork, informal conversations with residents of Arivaca, Arizona voiced similar concerns over strained social encounters whether it be with militia members, Border Patrol, migrants, smugglers, or activists. Because of their everyday contact with border-crossers and their belongings, some border residents now create art that memorialize the dead or provide water and this art has at times been vandalized by militia members (Auchter 2013). Humanitarian and activist groups create and maintain migrant shrines (Soto 2016), as well as create “drop sites,” leaving behind food and water for migrants, some of which are vandalized and slashed, reportedly by Border Patrol or militia members (Gokee and De León 2014). Not only do these drop sites become contentious spaces between humanitarians and anti-immigrant actors, but also between humanitarians and conservation groups. Despite their common goal against the border policies which create environmental degradation, environmental agencies have cited and spoken out against humanitarian volunteers for littering (Shellabarger, Peterson, and Sills 2012, Whitaker 2009).

Even with similar values and aims, various border groups conflict with one another. Other times, even with competing values and aims, groups become allies against common enemies. United by shared frustrations with Border Patrol’s misuse

and disregard of land as well as heightened border-crosser presence, a wide range of state and private natural resource and land managers now collaborate to address (often otherwise competing) agendas of grazing and farming, ecological biodiversity, riparian restoration, water conservation, and managing fires over land parcels (York and Schoon 2011). In these aforementioned ways, border-crossing has significantly shaped, complicated, and intensified the social and material relations in the borderlands.

In these complex social relations, material culture becomes one nexus of establishing the identity and emotional valence of border-crossers. Juanita Sundberg writes of the objects left behind by border-crossers as an intimate site of politics, where seemingly banal objects take on greater meaning: “Narrative expressions and spatial practices delineating where the intimate objects of daily life belong and how the body should relate to them work to summon a social order: appropriate behavior in relation to those objects has come to demarcate belonging, while behavior deemed inappropriate overwhelmingly summons exclusionary discourses and practices” (Sundberg 2008, 886). This means that for environmental conservationists or people against ‘illegal immigration,’ the objects left behind by border-crossers are defined as trash: that which has been discarded and does not belong, which breaks the narrative of the natural or the American. These beliefs about correct social order, who one is and if they belong in the borderlands, transform the borderlands into a “moral geography” (Taylor 2010), a space in which political and moral agendas continually reinvent the identities of border-crossers and their belongings. For border-crossers, the way in which their belongings are perceived influence decision making and risk taking. Quotidian objects such as water bottles expose the ecological and political threats with which border-crossers

must contend: take a black water bottle and drink boiling hot water or take a white water bottle and risk being spotted by Border Patrol (De León 2012). If objects in the borderlands can expose many of these political, material, and emotional dimensions of social role, what of architecture?

In the realm of environmental design studies, scholars use structuralism to investigate the relationship between social roles, activities, meaning, and space. Taking a narrow alleyway in Barcelona as a case study, Orengo and Robinson identify four groups of users who use the marginal site: people who live in the apartments overlooking the alley, graffiti writers, clubbers and party people, and prostitutes and their clientele (Robinson and Orengo 2007). These users are matched up with spatial markers (such as graffiti, signage, and refuse) and usage (activities and behaviors) as a way to reveal various territorial contestations. Thus some parts of environmental roles and relationships can be gathered from the analysis of what Zeisel has called “traces,” the conscious intervention or unconscious alterations of the environment after use (Zeisel 1981, 159). He posits that these traces can exhibit the process or use of the space, the adaptations for use, displays of the self, or public messages. The way these overlap, do not overlap, work against or with one another, all can hint at the various environmental roles of the inhabitants.

Some scholars have looked specifically at how spatial and spiritual/imagined territories are perceived, created, and mitigated by transgressors of social norms (Basso 1988, Biehl 2005, Pandolfo 1989). In these spaces where ‘self’ and ‘other’ are categories that are not only in tension, but also overlapping, the analysis of architecture can tell us something unique about socio-spatial relationships. Scholars from various

disciplines have posited that, quite simply, we are what we make and what we make is who we are. "Creating things is a fabrication of the social self," (Tilley 2006) and architecture is "'political plastic' - social forces slowing into form" (Weizman 2012). Investigating border-crosser architecture thus not only contributes further depth and breadth to the ways in which various populations interact in the desert during crossing, but also positions architecture to be active in constituting social relations. So we can then ask, in what ways does border-crosser architecture reflect and form social identity as it mutates in response to the borderland context?

While in general environmental design research has been conducted within a variety of schools of thought, some scholars have employed structuralism to probe the meaning of architecture. Physical attributes of architecture become experiential and cultural: "All the brute facts of construction, all our perceptions of gravity, and all our disposition toward spatial enclosure are 'humanized' and become the signs of other things" (Colquhoun 1981, 193). Instead of viewing architecture as emerging from or expressing a "natural order," meanings of architectural elements instead are "established by social custom" (Colquhoun 1981, 193). While the roots of structuralism reside in linguistic analysis, for the sake of this dissertation, semiology is less of interest than viewing architecture as part of culture, thus both producing and containing meaning within a system of social roles and rules.

It is worth mentioning here that some environmental design research employs more of a relational focus rather than the linguistic focus that often characterizes structuralism. Bill Hillier's concept of space syntax employs structuralism to frame space as a "range of limitations and potentialities" (Hillier 1996, 22), a physical configuration



that is experienced unconsciously and yet that communicates social codes and norms. This theory is not used in this dissertation but does illuminate the ways in which one can analyze the built environment in terms of a material system that produces meaning. David Canter's model of place is particularly well-suited to frame the dissertation's research sub-question because it facilitates the investigation of how people with different purposes and with different degrees of power interact with one another. Simply put, Canter's model extends the conversation around architecture beyond the functional and to the relational as it combines activities, concepts, and physical properties of place together. He focuses on not only space and its social codes or rules, but also how different social roles can affect the access to and use of space.

### **Refuge: Emotion and Experience**

A multitude of United States policies have essentially created a traumatic death trap for border-crossers (Nevins 2005, Rubio-Goldsmith 2006, Magaña 2011, Cornelius 2001). In 1994, as part of the Clinton Administration's immigration system reform, the U.S. Border Patrol released their "Prevention Through Deterrence" (PTD) strategic plan. This nation-wide plan was premised on "the prediction that with traditional entry and smuggling routes disrupted, illegal traffic will be deterred, or forced over more hostile terrain" (U.S. Customs and Border Protection 1994, 7). Disruption of traditional entry meant increasing the amount of agents, technology, and physical barriers at urban entry points. Forcing border-crossers over more hostile terrain meant that, "illegal entrants crossing through remote, uninhabited expanses of land and sea along the border can find themselves in mortal danger" (U.S. Customs and Border Protection 1994, 2). In

other words, by fortressing cities along the border, migrants would either give up, or be pushed into the desert where they were likely to die [Figure 2.1].

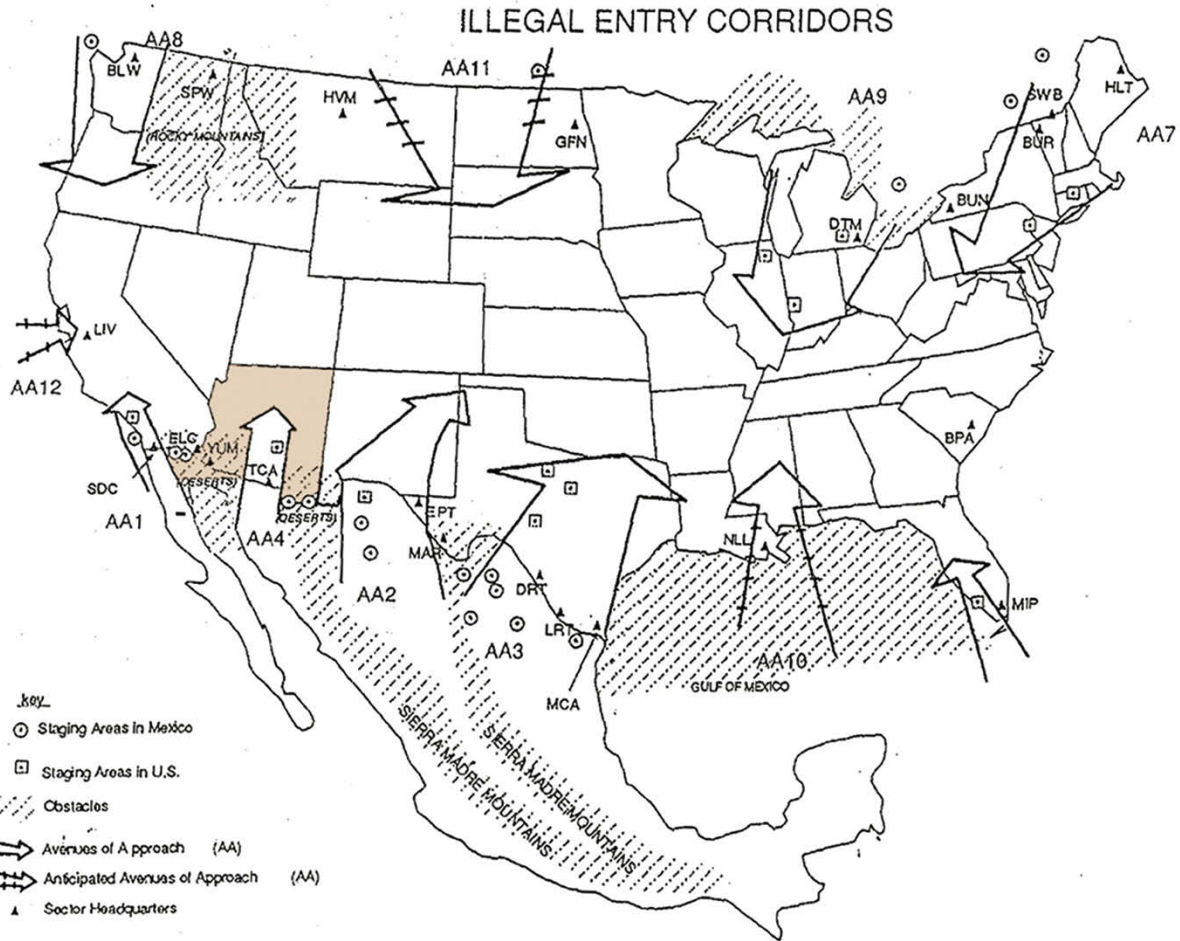


Figure 2.1 "Avenues of approach" (AA) arrows demarcate locations of heaviest "illegal immigration" activity. Map taken from 1994 Prevention Through Deterrence document. Shading added to Arizona.

Indeed, forcing unauthorized border-crossing to shift into the deserts had mortal consequences. Between 2006 and 2013<sup>7</sup>, out of 1,490 recovered remains by the Pima County Medical Examiner, 37 percent were determined to be from exposure and 48

<sup>7</sup> Though more recent data exists, the figures here are capped at 2013 to provide the particular context to the years of this dissertation's field work (2012 and 2013).

percent were cause unknown, but also likely to be from exposure (Martínez et al. 2014, 276). For those lucky enough to survive, ailments such as severe blisters, dehydration, and hyperthermia take a marked toll on border-crossers' bodies (De León 2013b). In addition to environmental threats, there are also social ones, "The spatial liminality of transit migration exacerbate processes of exclusion and violence" (Vogt 2013, 765). Migrants often endure sexual assault, kidnapping, extortion, and other exploitations at the hands of cartel members, bandits, and strangers (Vogt 2013, Slack and Whiteford 2011, Ferguson, Price, and Parks 2010). Beyond the physical threats of border crossing is a wealth of emotional duress: anxiety, fear, loneliness, and depression, among others (Crocker 2015, O'Leary 2009).

Border-crossing is framed on all sides by physical and mental trauma. Even before the journey, many migrants, especially those from Central America, have witnessed and suffered violence in their countries of origin often since childhood (Keller et al. 2017). Then along the way to the U.S.-Mexico border, migrants are continually economically exploited, threatened, physically assaulted, and subject to injuries (such as amputation of limbs on train rides) (Vogt 2013). Studies of post-migration trauma underscore high levels of PTSD, major depression, and anxiety in migrants and refugees stemming from days spent in detention centers or continual stressors such as separation from family, fear of deportation, alienation, economic instability, and so forth (Keller et al. 2017, Lusk, McCallister, and Villalobos 2013). During crossing itself, the Sonoran Borderlands are hard on the body and mind. There are extreme high and low temperatures, miles upon miles of nearly indistinguishable landscape, venomous flora and fauna, treacherous terrain, the stress of being under surveillance, the fear of being

caught, the presence of armed bandits and cartel operatives, and so on. If a key assumption of the PTD strategy was that, “Violence will increase as effects of strategy are felt” (U.S. Customs and Border Protection 1994) and, “Violence exercised by and through space is spatial torture” (Tschumi 1996, 124), then border-crosser architecture is born out of an abusive environment from which it must seek refuge.

Architecture, at its root, can be conceived as being shelter: from the elements, from others, and from fear. The Judeo-Christian human origin story follows a narrative arc whereby we once existed in a perfect space (Garden of Eden) and then were traumatically expelled from it. Thrust out of a protected space, humans are charged with the responsibility of fashioning their own shelter and food, “to till the ground from whence he was taken” (Genesis 3:23). These Edenic beginnings parallel our biological origin. The womb is a perfect vessel where we are housed by a second body, where our environment and our self is in many ways indistinct. Then we are evicted. Architecture thus provides us with a home away from home, a way to shelter our displaced selves. The earliest writings on architecture stress how buildings should respond to natural external forces and cultural norms in order to provide our physical and social selves a safe haven (Vitruvius, Morgan, and Warren 1914a, Laugier 1977, Alberti 1988).

Beyond physical shelter, philosophers have stressed architecture’s role in providing existential shelter, particularly the house. For Gaston Bachelard, the home has two defining characteristics: 1) it is a place of archetypal refuge, “a space... that may be defended against adverse forces, the space we love” (Bachelard and Jolas 1994, xxxv), and, 2) it is a place where multiple dialectics oscillate such as “retreat and expansion, simplicity and magnificence...repose and flight of being” (Bachelard and

Jolas 1994, 65). The borderlands, in a way, echo the story of being expelled from home whether that be being unable to stay in Honduras because of extreme violence, unable to stay in Mexico because of economic reasons, or unable to stay in the States because of being deported. And so, people end up being in a kind of transitional space, the purgatory of the desert.<sup>8</sup>

When no man's land is inhabited, it becomes: "A middle place, composed of interactions and inter-views, the frontier is a sort of void, a narrative symbol of exchanges and encounters. Passing by, an architect suddenly appropriates this 'in-between space' and builds a great edifice on it... transformation of the void into a plenitude, of the in-between into an established place" (Certeau 1984, 127). Shelter highlights the purpose of a structure to protect the inhabitant from the unwanted events and qualities of the outside world whether that be violence, inclement weather, or other things that threaten bodily and emotional harms. Shelter also brings people together in a social milieu.

Most notably, Heidegger's concept of "dwelling" (Heidegger 1993) as well as Bachelard's writings on home and house (Bachelard and Jolas 1994) have argued the existential purpose of shelter, not just as physical refuge, but psychological as well. Architecture takes the great unknown and circumscribes it into a smaller, less infinite realm: "The boundaries of a built space are known as *floor, wall and ceiling*. The boundaries of a landscape are structurally similar and consist of ground, horizon, and sky" (Norberg-Schulz 1980, 13). Via this structural similarity, our built environment

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<sup>8</sup> For more discussion on liminality and how 'illegality' also places people in a *social* space between, see this chapter's section on 'role.' For an in-depth ethnography of liminality as experienced by undocumented Latino migrant farmworkers in the U.S., see Leo Chavez's monograph (Chavez 1998).

echoes the natural environment and signals our place in the cosmos. The character of architecture (experienced through such qualities as materiality, light, temperature, and color as well as the symbolic meanings that arise from these qualities), can create a familiar and safe microcosm for ourselves in which we feel we belong - the existential purpose of building (Norberg-Schulz 1980, 18).

The conceptions of dwelling are almost unilaterally conceived as a self-contained, stable refuge yet this is at odds with the reality of the borderlands. Dwelling in space is portrayed as altogether nonporous and complete and almost eternal: “The essential experiential structure of rest, I argue, is at-homeness— the usually unnoticed, taken-for-granted situation of being comfortable in and familiar with the everyday world in which one lives and outside of which one is 'visiting', 'in transit', 'not at home', 'out of place' or 'traveling.' The dwelling-place is generally the spatial centre of at-homeness” (Seamon 1979, 70). In this definition, dwelling is contrasted with being on the move and threatened. Instead, it unilaterally supports that, “*Dwelling* means to be at peace in a protected place” (Norberg-Schulz 1980, 22). The discussion of dwelling and place attachment is largely binary: there is either dwelling where one can achieve perfect harmony or there is the foreign, transitory world where we are lost with which we are at-odds. Negatively valued spaces are avoided and rarely mentioned and in some cases, even actively excluded: “...hostile space is hardly mentioned in these pages. The space of hatred and combat can only be studied in the context of impassioned subject matter and apocalyptic images. For the present, we shall consider the images that *attract*” (Bachelard and Jolas 1994, xxxvi). While a sense of transcendent dwelling may exist in situations, we are no longer in Eden. Refuge is born out of more than nurturing and

attraction - places of refuge must work to protect the self from hostile space. Refuge is a structure constantly at work, mitigating threats. It can be temporary, nomadic, and contested while it provides restoration.

When approaching notions of place in the borderlands, the underlying theories of place must allow for existential complexity – in dwelling, comfort does not exclude discomfort – at no time are we fully in a state of perfect bliss. While refuge separates an inside from an outside, offering protection, it also implies fleeing from something in a forced and frantic manner - a place sought by a refugee, someone expelled from space, even losing their humanity and citizenship. In a landscape of trauma, architecture is both a powerful respite from, and a desperate reaction against, violence: “Like any form of violence, the violence of architecture also contains the possibility of change, of renewal. Like any violence, the violence of architecture is deeply Dionysian” (Tschumi 1996, 132). The refuge becomes a brief place of respite, often moving along with the inhabitant. Refuge has the potential to heal and nurture as an intimate escape: “Certain environments even have the potential to be restorative, to heal us: “The environment... must... be rich enough and coherent enough that it constitutes a whole other world... there must be compatibility between the environment and one’s purposes and inclinations” (Kaplan 1995, 173).

But despite this capacity to restore, refuge is always formed by the displacement of its inhabitant and thus is always double-edged, neither fully a safe space or one of bare survival; neither a place of solitude nor stable community. There is a tension between one’s environment and one’s purpose. Refuge is more ephemeral, political, and perhaps even dangerous; a way “... of mastering an uncertain future” (Arendt 1994,

111). Thus it becomes crucial to ask what is border-crosser architecture's role in providing refuge. In the context of trauma, the research sub-question seeks to investigate both the positive characterizations of architectural refuge, as a sanctified safe space of restoration, as well as the difficult circumstances out of which refuge arises.

The phenomenological school of thought is particularly appropriate for exploring questions of refuge with its focus on the depth of multi-sensory experience and focus on subjectivity. Professional architectural practice has been critiqued for privileging the visual over all other senses (Dovey 1993). Maire O'Neill warns against looking at architecture "as object," abstract and aesthetic, and offers as an alternative a "haptic" approach to space, stressing the "experiential qualities of place...the integration of many senses, such as touch, positional awareness, balance, sound, movement, and the memory of previous experiences" (O'Neill 2001, 4). Thus the analysis of the physical elements of architecture can extend beyond form and function and into the meaning of space, the ways in which our environments reflect our inner, emotional lives (Mugerauer 1995, 2-3).

Despite the breadth and depth of phenomenology, David Seamon stresses some consistencies in phenomenological design methods within environmental design studies (Seamon 2000). For one, the researcher herself functions as human instrument (specifically her body's in-the-world immersion in place). This instrument "measures" spiritual, emotional, and multisensory experience and works to challenge the dominance of the visual sense. The structure of the research itself is adaptable and modifiable to incorporate and respond to knowledge, experience, and data gathered during research



(in other words the research can, and in fact should, change as one goes). The dichotomy between person and world, and subject and object, is negated by the world-view that human and world co-create one another (another way of looking at this is that the environment is no longer a passive object, but in fact an agentive entity).

Phenomenological research is also concerned with the experience of the everyday – this is not to say that it does not take into account, say, transgressive or deviant individuals or an intense event like a one-time natural disaster. In fact, there is now a stress of multivocality (including ‘deviance’ or less normative experiences) that works against the universalization of the body. For example, there is literature on women’s bodies (Young 2005), the disabled body (Kohrman 2005), and the ill body (Petryna 2002) which all reveal how different bodies experience the world differently. This newer movement in phenomenological research seeks to find a balance between early phenomenological essentialism on the one hand and the radical fragmented and relativism of postmodernists and deconstructivists (Seamon 2000). The phenomenology in which this project inscribes itself is a kind of hybrid phenomenology in an attempt to find the common existential experiences among border-crossers as well as the individual and contrasting ones.

### **Resistance: Politics and Power**

Like many national borders, the border between the United States and Mexico has been a contested space since its inception (Ettinger 2009, Hernandez 2010, Dear 2013). The landscape is monitored and controlled by the use of video cameras, infrared night scopes, high-intensity spot lights, and helicopter sweeps [Figure 2.2]. Additionally, there is heightened human presence (border patrol agents making rounds, check-points

on main roads), technology (computerized systems that record and store biometric information on captured migrants), and spatial infrastructure (fencing, road construction to provide easy access for border patrol vehicles) (Blum 2015). These elements of operations, weaponry, and technology systematically manning a landscape already can be characterized as ‘militaristic,’ and this affiliation is more than an analogy. There are juridical and cultural frameworks which directly tie the military to the Border Patrol and the control of the borderlands.



Figure 2.2 The militarized border as illustrated by US Customs and Border Protection with various surveillance technologies and tactics to detect and capture border-crossers. Source: (U.S. Customs and Border Protection 2016, 14).

With the the war on drugs in the 1980s, the border took on the valence of a battlefield and thus the military became even more directly involved with Border Patrol.

In 1986, the military established Joint Task Force-6, an administrative body that assigns military units in response to police requests. Through this framework, the military loaned equipment and participated in construction projects to secure the border, as well as trained Border Patrol agents in interrogation techniques and weapons use. More directly, small military units also were deployed to conduct covert surveillance in areas of suspected drug smuggling. While at first glance this may not seem intrinsically problematic, the major distinction between a military and policing approach is that, “Police authorities must be nominally concerned with civil rights and due process, while military troops are not. Instead, they are oriented toward the ‘neutralization’ or elimination of hostile threats or enemies” (Dunn 2001, 8). Most border-crossers are nonthreatening and unarmed and so when agents or troops trained under ‘rules of engagement’ and are ready to kill in response to any *perceived* threat, the groundwork is laid for excessive force with mortal consequences. The perception of threat can be clouded by a myriad of circumstances, but the issue of race is certainly one amongst them. The border creation was not only a matter of defining national territory but also a “racial-territorial project” (Kurz and Berry 2015, 152) rife with anxieties of the “pollution” of brown bodies. Through a combination of policy and procedure, racial profiling polices this racial-territorial boundary (Hernandez 2009).

Because of the contested nature of the border, critical theory does well in rendering visible the invisible power relations at work. While critical theory is similar to structuralism in its largely intersubjective focus, it is usually employed at a broader scale of analysis, focusing on power structures and hidden political forces. Forensic architecture is an apt example in the ways in which analysis can politicize architectural

elements like border walls and deploy them as material evidence of divisiveness and oppression (Franke and Weizman 2014, 14-20). One can expose the erection of architecture as a political act, as well as code the destruction of architecture as a monument to violence and displacement (Herscher 2010). Critical geographers have revealed the de/constructions of power in the built environment, whether through systems of race, gender, or class (Crawford 1999, Dear and Flusty 2002, Harvey 1977, Soja 1989). These scholars argue that space is coded by power relations and created through social conflict. Ed Soja, for example, sees buildings in downtown Los Angeles as "commanding symbolic forms... designed to announce, ceremonialize, administer, acculturate, discipline, and control" (Soja 1996, 234). Architecture is Draconian. Architecture curtails the mobility of target populations and disseminates fear (Davis 1998).

National borders are an architecture of control, enforcement, and exclusion (Papademetriou and Collett 2011). While they are "designed to be impervious, as resistant to the passage of goods or people as possible (Casey 2011, 385), national borders and their walls and fences can nevertheless be penetrated. In conversations about the U.S.-Mexico Border, scholars have used Foucault's theory (and its descendants) as a basis to underscore power relations between Border Patrol and border-crossers, especially with regard to surveillance and technologies (Newel, Gomez, and Guajardo 2017). Foucault's writing on Bentham's Panopticon, a prison structure built to project the illusion of an ever-present omniscient gaze via a centralized surveillance point and blinding light that shines into each cell. Architecture becomes a brutal mechanism of control: "This enclosed, segmented space, observed at every

point, in which the individuals are inserted in a fixed place, in which the slightest movements are supervised... in which power is exercised without division, according to a continuous hierarchical figure” (Foucault 1977, 197). While this theoretical framework does much to emphasize the power of the state exercised through technology and tactics at the border, there is a crucial distinction between a prison setting and the borderlands: unlike prisoners, border-crossers are in motion, moving across the landscape, instead of being contained in a space where nothing can be invisible. There is still space for resistance.

When border-crossers cross the border, their transgression converts the border into a boundary which is “porous in character (like the human skin), admitting the passage of various substances through it...” (Casey 2011, 385). The border becomes a borderland and the line becomes a field. The act of border-crossing has been framed as resistance: “Mexican autonomous migration to the United States can be interpreted as an example of everyday resistance to global apartheid that I call *resistencia hormiga* (an ‘antlike resistance’). Border-crossers resist hostile terrain through resources and social relations like money and tactics for evading apprehension (Spener 2010, 11). If architecture can be a brutal tool of the state, can it also become a tactic of resistance?

bell hooks writes of underground spaces particularly for black people’s radical cultural practice: “For me this space of radical openness is a margin - a profound edge. Locating oneself there is difficult yet necessary. It is not a ‘safe’ place. One is always at risk” (hooks 2000, 206) ... “I am located in the margin. I make a definitive distinction between that marginality which is imposed by oppressive structures and that marginality one chooses as a site of resistance - as location of radical openness and possibility”

(hooks 2000, 209). The border can be such a margin, such an edge, out of which one works to resist oppressive powers, and yet, at the same time, where one is perpetually at risk of discovery, of one's labor being exploited, of being subsumed. While hooks' resistance is a reclamation of a marginal position, Gloria Anzaldua's resistance is an occupation of all positions, the margin and the center, and to hold all of those in one space, throwing out nothing. Crafting the U.S.-Mexico borderlands as a poetic and critical way to look at resistance. One mode of resistance is "locked into a duel of oppressor and oppressed" (78). The border separates this space from that, this people from that people, and thus resistance becomes binary. The alternative resistance is one more akin to the borderlands: "At some point, on our way to a new consciousness, we will have to leave the opposite bank, the split between the two mortal combatants... so that we are on both shores at once" (78). The strength of the *mestiza*, the woman who stands on both shores, is "a tolerance for contradictions, a tolerance for ambiguity... she sustains contradictions..." (79).

In order for the local to resist the global, for the particular to resist homogenization, for the poetic to resist the technological, there needs to be "...the absolute precondition of a bounded domain in order to create an architecture of resistance. Only such a defined boundary will permit the build form to stand against - and hence literally to withstand in an institutional sense - the endless processal flux of the Megalopolis" (Frampton 1998, 24-25). While Frampton wrote of an architecture of resistance in the context of cities, the same might be said about border-crosser in the procedural flux of the borderlands. To deflect surveillance, to establish territories, and to enact counterstrategies, one re-inscribes a bounded domain within a bounded domain.

Thus architecture could be a potential form of “border practices... that counteract the border’s system of oppression and exclusion with other means than the strict military, violent or transgressive ones” (Schoonderbeek 2015, 99).

As unauthorized border-crossers are systematically surveilled and expelled from the borderlands, they can bear down and create momentary strongholds. One such architectural border practice are the informal settlements in Tijuana. Inspired by these, Ted Cruz urges an architectural practice using “tactics of invasion” where infrastructure follows inhabitation, and where architecture becomes “a subversion of the information imprinted artificially on the land, the alteration of the boundaries and limits established by the institutions of official development...” (Cruz 2005, 36). Can border-crosser architecture also work to covertly resist the boundaries of the border and its militarization? If so, what shape will it take and what tactic will it employ: that of an opposing military force or a small and wily ant?

### Chapter 3 Research Design

Fragments of architecture (bits of walls, of rooms, of streets, of ideas) are all one actually sees. These fragments are like beginnings without ends... They are traces. They are in-between (Tschumi 1996, 95).

The borderlands are a contested terrain within which various forces and agents interact. As such, investigating border-crosser architecture as a discreet element, a thing in a vacuum, is not ideal. To do so would be to overlook the ways in which the environment and climate, socio-political factors, and inner lives of people in the desert all play a role in forming architecture. Thus, the over-arching system of inquiry for this dissertation is an intersubjective paradigm: "Ontologically, [intersubjectivity] assumes that although there are multiple diverse viewpoints regarding sociocultural realities, it is nevertheless possible to achieve shared understandings of those realities" (Groat and Wang 2013, 78). For this study, this means looking at architecture as both a physical object and a network of relations that is created by people and also that shapes culture and impacts people's personal lives. Intersubjectivity also means that the researcher is far from being separate from the subject she studies, and instead of this being an obstacle, rather it is an opportunity to ask question: "What happens if we begin from the opposite premise [from traditional objectivity], that we can know the world because we are connected with it?" (Hayles 1995, 48). In order to address these connections and relationships, this research is framed as a case study.

This case study takes the Sonora Desert borderlands as a site and cross-references four bodies of culled research material: sites, structures, artifacts, and



interviews. This material was collected and analyzed using various strategies including site survey, GIS data collection, rich description, visual analysis, hermeneutic reading, quantitative and qualitative measurements, interviews, and artifact collection. These tactics span three primary disciplines: architecture, archaeology, and anthropology.

What follows in this chapter is an elaboration on research design and implementation. The first section discusses a research design drawing from different disciplines. In particular, it highlights the ways in which multiple sources of evidence (artifacts, interviews, and architecture) can have limitations when considered as stand-alone evidence but can be strengthened when cross-referenced with one another. The second section introduces the case study as a helpful framework to triangulate these multiple sources as it can “include an examination of overlapping and different facets” and “find contradictions and new perspectives... to add scope and breadth to a study” (Creswell 1994, 189). The third section introduces the fieldwork, including site selection, sources of evidence, and particular methods. The purpose of this chapter is not only to make transparent my methods, but also to address some of the inherent challenges of the subject matter, methods, and materials.

### **An Interdisciplinary Approach: Working with Fragments and Traces**

While architecture is at the forefront of this dissertation’s inquiry, I apply a variety of interdisciplinary approaches to architecture and its surrounds so that a border-crosser structure can be contextualized and informed by the political processes that shape it as well as the inner lives of the people who build and inhabit it. Archaeology of the contemporary past (Rathje and Murphy 1992, Harrison and Schofield 2010, González-Ruibal 2008, Harrison 2011) can identify artifacts that, though not physically part of the

structures, can provide insight into who was inside the structure and when and for what the structure was used. A visual analysis of the structures draws from an art history approach of identifying elements of a building and making assertions on the intent of the builder and the cultural context of the time it was built, fore-fronting the form and materiality of the structures. Rich description (Finlay 2012) adds depth to analysis by providing an account of the on-the-ground lived experience of a space, drawing upon other senses beyond the visual, in particular the auditory and tactile. Interviews supplement the investigation further by narrating that which may not leave material traces, or, by revealing the source of material traces that may have not been evident to the researcher.

The architectural design method has been criticized for relying on abstract geometry instead of lived experience (Dovey 1993) and for neglecting the pre-existing conditions of sites by creating a *tabula rasa* (Burns 1991). Using archaeology, ethnography, and spatial analysis, this dissertation undertakes an on-the-ground engagement with architectural context adding in the inhabitant's valuable perspective that often lies outside the architect's profession, training, and even personal value system (Cuff 1991). Nevertheless, architectonic documentation can add to that the spatial and physical details such as aesthetic form, a structure's response to climate and site, attention to material and construction methods, and proportion to body.

Interviews are particularly helpful in refuting, supporting, and adding complexity to the visual analysis of the structures and artifacts. In particular, the provenance and life history of artifacts can be severely obscured by a variety of environmental, social, and economic factors. Since the desert's ecology and climate change so quickly,

objects are prone to rapid erosion and decay. Animals inhabit, devour, and transport artifacts, obfuscating where an item was originally left or what its condition was at the time of its deposit. A hole in the toe box of a shoe may be made from a bunion continually and painfully rubbing against the leather, or it could be made by a small rodent or large insect as they burrowed in the shoe to hide from the sun. Beyond desert fauna, migrants themselves have reported moving, re-using, or covering things they find in the desert. Globalization processes further complicate the history of an artifact. A "Made in the USA" tag inside a shirt found in the borderlands may not belong to someone who at some point lived in the States - instead the shirt may have been bought or received in Mexico. Inferring the beliefs, perceptions, and experiences of people through the objects they leave can be equally (or even more so) troublesome. Religious items, for example, do not always denote or connote that the border-crosser was a believer - interviewees often mentioned that though they were not themselves religious, a devout family member gifted them a cross or a virgin's image for their crossing. In this case, the rosary should be read more as a memento of a family member than a symbol of God or salvation. Thus interviews quickly reveal the complexity of interpreting artifacts as demographic indicators.

Artifacts can reveal what may be lost in interviews. The physical condition, or "use-wear" of objects (the way the body's unconscious or conscious movements and activities are stored in the surface or form of an object), is evidence of physical pain and suffering. The destroyed sole of a shoe, for example, is the artifact of a long difficult journey where extensive walking wears away the material of the shoe, leading to blisters and other foot injuries (De León 2013b). In many interviews, when asked if they

had any injuries, migrants would reply a concrete, “No,” even when their feet were bandaged. When probed further about their blisters and their limps, they would brush off the injury often saying that others had suffered far worse and that their swollen, bleeding, infected feet, “were nothing.” First-aid ointments, bandages, holey socks, and worn-out boots tell a story of physical pain that may be omitted by first-person accounts of crossing. In this way, objects can remember things that people cannot or choose not to remember — they can tell a story of trauma that the brain and the body of the border-crosser silences.

Artifacts and architecture share much in common in the borderlands. Just as we inhabit architecture we inhabit objects and vice versa. Clothing may be the closest analog, an envelope and skin in which we place our bodies to project identity, to camouflage ourselves, to protect our vulnerable organs. The way in which border-crosser architecture surrounds the body so closely, in such a tactile fashion, one can begin to think of architecture as the artifact of our second skin. Just as clothing, in its wear patterns, its scent, its aesthetics, reveals the role and personality of its wearer, so too does does architecture carry the imprints of its builder and its inhabitant. The way in which architecture is 'worn,' reveals not only its function and the events that transpire within, but also its character. Just as, to a certain extent, "The body... is the environment of the self" (Entwistle 2000, 332), the inverse is also true: the environment is the body of the self. While one's clothing functions as a second skin, mediating climate and identity, the walls of architecture serve as an additional tertiary skin. That which affects the body transfers to the materiality, form, scent, quality, and so on, of the architecture and objects which the body encounters and makes.

Artifacts can also reveal the phenomenology of border-crossing. Scents embedded into artifacts can provide us with a certain intimate glance into the people that inhabit the shelters: "The magic of cloth... is that it receives us: receives our smells, our sweat, our shape even" (Stallybrass 1993). The "magic" of artifacts in the desert is far less romantic. The most common odors are the mildew of sweat, the musk of urine, the earthiness of decay, and the putrid sweet smell of perfumed deodorant trying but failing to cover up all the bodily expulsions that came before it. Among the artifacts left behind by border-crossers, it is common to find deodorant, toothpaste, cologne, and discarded dirty clothing suggesting that one must make the transition away from the desert self to the city self so as not to look, or more importantly, *smell* like a migrant (De León 2013b). This is an attempt to mask the body's scents after stress, exertion, dehydration, and interrupted habits. These scents can be extrapolated as the effect of fear (of being left behind by the group, attacked by the mafia, or found by the Border Patrol), stress (produced by fear, by the rules set forth by the *coyote*, not being able to stop to rest, etc.), or illness (the blood of a wound, the urine of the onset of dehydration, excessive sweat with untreated diabetes, and so on). Because of the duration and hardships of the border-crosser journey, travelers must carry their bodily waste with them, embedded in their clothing.

Material traces (or how materiality and physical form are altered) can lend insight into cultural context, human inhabitation (how and for what a space is used), and existential and sensory experience. The traces on or around architecture tell us what people do in places and to places. According to Zeisel, there are different types of traces, each revealing something different about the relationship of person to place.

“By-Products” of use such as worn-out areas of floors can tell us about the unconscious use of space and the patterns of circulation in a room. “Adaptations” of a space such as the addition of a room can point to an emergent or expanded use of space that was likely unintended by the original designer. “Displays of self” such as repainting a wall a different color can point to someone’s desire to connect more to a space or display ownership of it (Zeisel 1981, 170). In this way, documented traces in spaces bring to light how people use and change their environment. These traces can be further extended to gain insight into people’s inner desires, cultural beliefs, social conflicts, and so forth. Forensic architecture frames architecture as “*sensor and agent*,” a “diagram that records the influence of an entangled and potentially infinite political/natural environment” (Weizman 2012, 7-8). Since a building fluctuates and responds to surrounding conditions, we can also interpret the imprints upon its body and prove the violent doings of an oppressive state.

By interpolating material evidence and recollected experience within a critical theory framework, one can work to preserve the ambiguity and conflict intrinsic to the borderlands while still exploring the patterns and themes that emerge in, around, and out from border-crosser architecture. For this purpose, this dissertation turns to a case study approach.

### **The Case Study Approach**

A case study can provide a framework for interdisciplinary study focused on a contemporary and complex issue: “The distinctive need for case studies arises out of the desire to understand complex social phenomena... to retain the holistic and meaningful characteristics of real-life events” (Yin 2009, 4) while using multiple sources

of evidence. Because of these properties, the case study research design lends itself particularly well to the study of border-crosser architecture with a multi-faceted focus on materiality, experience, and culture. This case study adopts the research tactics of qualitative and quantitative physical measurements, rich description, hermeneutic reading (Mugerauer 1995), artifact collection and analysis, and interviewing. The latter two tactics, and their cross-referencing, are used in a method put forth and developed since 2009 by Dr. Jason De León's Undocumented Migration Project (UMP).

Since no in-depth scholarly work to date has been done on this particular kind of border-crosser architecture, this case study is not an "instrumental" (Stake 2003, 137) one in that it does not aim to support (or contest) an existing theory or even work toward a generalizable theory (Yin 2009, 15). Instead, it aims to follow a "revelatory case study" model (Yin 2009, 48), an investigation of a fleeting and unique condition that, at the same time, can have wider implications or, "naturalistic generalization" (Stake 2003, 145), or the ability to connect to an audience. This work strives not only to collect research material, but also to transport the reader into a place that she has likely never personally experienced. Immersion into the case can itself generate new knowledge as the reader creates a hybrid between her experiences and those experiences portrayed by the author and/or subjects. In other words, the case study takes the form of a social construction of knowledge. Allowing a singular case study to stand on its own (as opposed to relying on previous case studies or theories) can give weight to the specificity of culture and attention to the messy complexity of any lived experience. Generalizing out to a bigger theory can potentially flatten out the particularities of each

individual case, the more nuanced processes, and the individual hierarchy of the units of analysis and their relationships to one another.

Though I do not use any other case study as a mode of comparison, there are ways to lend reliability to the study. There have been two dominant methods of encouraging, if not ensuring, internal validity of case studies. These are: 1) redundancy of data and data collection methods (Stake 2003, 148), and 2) "pattern-matching" or triangulating (Yin 2009, 18). Both are about repetition and consistency. Multiple sources of evidence gathered and analyzed via interdisciplinary tactics is the prime method of triangulation used in this dissertation. Collected material iteratively affected the content and form of the research tactics. For example, interviews would identify the characteristics of a structure which would help visually document and distinguish structures in the desert. In another example, finding used first-aid artifacts in the desert highlighted the discomfort of a sustained foot injury that border-crossers downplay or omit during interviews (De León 2013b). These are ways in which the collected materials both cross-examine one another and also influence the way they are gathered and interpreted.

Within the framework of the case study, each research sub-question has its own theme, is framed by a specific intersection of theories, draws from different bodies of evidence, and employs different tactics for the gathering and analysis of the evidence (see Table 3.1).



THEME	RESEARCH QUESTION	SCHOOL OF THOUGHT	EVIDENCE	TACTICS
Social Role	To what extent do social roles dictate or form the experience of, access to, and form of architecture?	Environment & Behavior and Critical Theory	GPS coordinates Existing ethnography Interviews Artifacts	- Hermeneutic readings of artifacts and space-power dynamics - analysis of site, form and materiality in terms of affordance, access, and power - categorical analysis of artifacts - Visual representation (photographs, video, drawings)
Refuge	How do structures elucidate the multidimensional qualities of refuge for border-crossers?	Phenomenology and Critical Theory	Structures Interviews Artifacts Rich description Existing ethnography	- Phenomenological interpretation of structures, sounds, and artifacts (use wear, personal value, first-aid and controlled substances) - ethnographic narrative - measurements of structure dimensions, temperature, light, and orientation - Visual representation (photographs, video, drawings)
Resistance	In what ways do these structures illuminate the contested nature of the borderlands?	Critical Theory and Phenomenology	GIS maps Interviews Existing ethnography Border Patrol policies Artifacts	- hermeneutic readings of artifacts in terms of bodily effect and environmental impact - Visual representation (photographs, video, drawings)

Table 3.1 Organization of the case study by research sub-question and the schools of thought, types of evidence, and tactics employed.

This case study’s theoretical framework draws from three schools of thought to best address each sub-research question. In the realm of environmental design research, precedent studies using structuralist analyses focus on the relationship between material aspects of space and people’s goals, behavior, and identity. Phenomenological studies typically focus on the often-essential experience and sensations of place (Violich 1985, O’Neill 2001, Tuan 1975, Ingold 2000). And finally, critical theory emphasizes power dynamics, difference, and the revelation of invisible elements of the built environment. Critical analysis takes architecture out of the normative arena of practice, formal analysis, and challenge conventional representations and readings of space (Borden and Rendell 2000, 8). Combining these three frameworks, socio-cultural patterns, experiential and existential qualities, and

political realms are all addressed. This dissertation's case study affirms that 'being in the world' is not just subjective phenomenological experience but also inclusive of intersubjective modes of being (Groat and Wang 2013, 76).

In essence, this tripartite analytical framework seeks to locate the way often-intangible forces of social interaction, emotional experience, and power become a tactile reality and how these narratives are literally housed in architecture and experience in the body. The aim of this interdisciplinary and multi-modal research design is not to provide conclusive typologies or sociological principals that explain the existence of border-crosser architecture, but rather to present the structures as complex entities with social and material (structural), emotional and existential (phenomenological), as well as political (critical) dimensions.

### **Fieldwork**

Though US government policies and strategies affect the entire length of the US-Mexico border, they have had a particularly salient effect in the Arizona borderlands. In the years of fieldwork, the Tucson sector was the busiest crossing area with more border apprehensions than in any other national sector with 120,000 apprehensions in 2012 and 120,939 in 2013 (United States Border Patrol 2013, 2012). Because of the intensity and frequency of border-crossing, the Tucson Sector was selected as the geographical location for the UMP. Defined by Border Patrol to cover 262 border miles with 4,200 working agents, the Tucson sector is comprised of eight stations in the towns and cities of Why, Casa Grande, Tucson, Nogales, Willcox, Sonoita, Bisbee, and Douglas (United States Border Patrol 2016). Each station is responsible for up to 7,000 square miles of terrain and varies from urban to rural to wilderness contexts. The

borderlands are a complex intersection of physical, cultural, and legislative terrain to which the Border Patrol responds with multiple strategies.

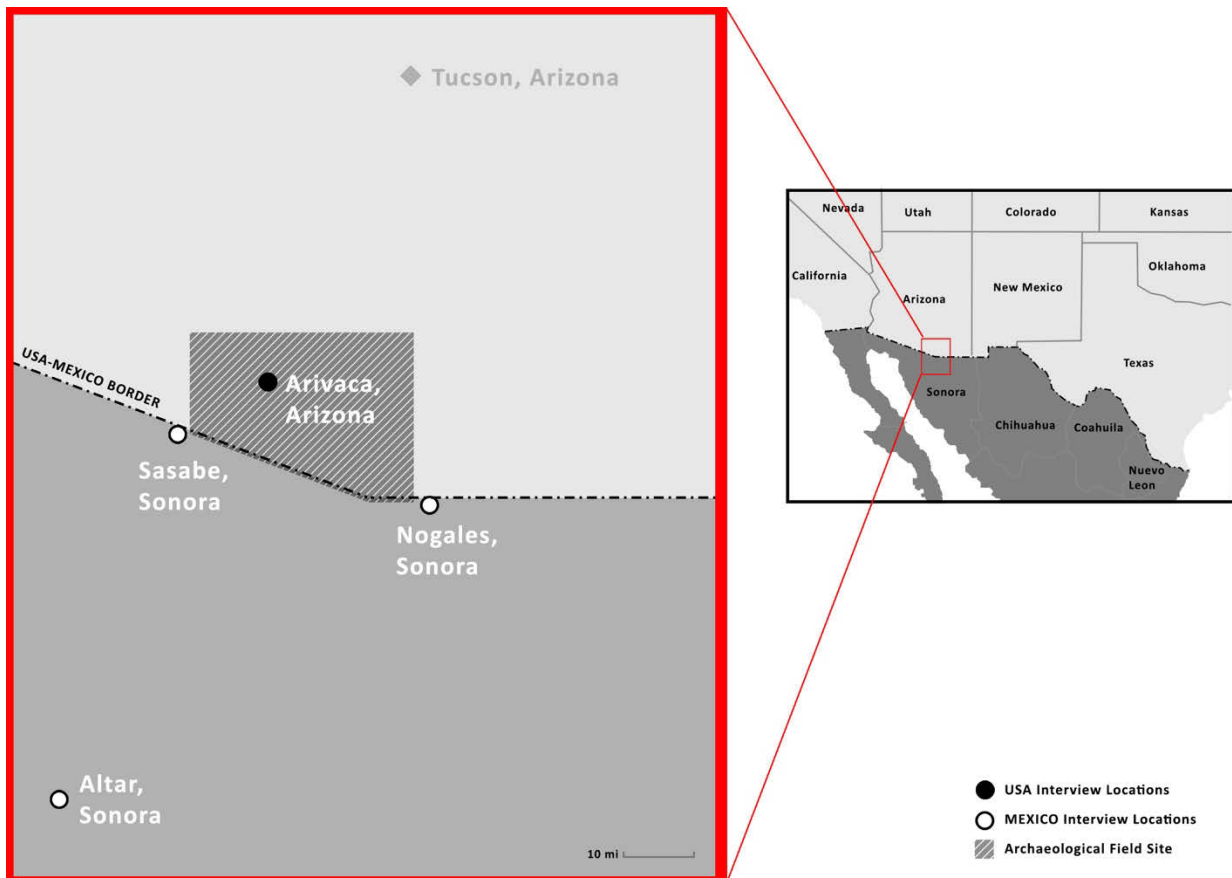


Figure 3.1 Map of fieldwork areas in 2012 and 2013.

Dr. De León's fieldwork from 2009 to 2013 identified regions of active border-crossing and the UMP and places where border-crosser bodies were recovered. During the 2012 and 2013 field seasons, the UMP surveyed 33.5 square miles and selected sites according to distance from the border and variance in terrain and ecosystem [Figure 3.1]. This allowed for a semi-random yet systematic surveying of a wide cross-section of the borderlands. In addition to these sites, the UMP revisited a few sites from earlier field seasons which were initially found through informal conversations with

humanitarians<sup>9</sup>. While not an exhaustive account of all possible sites, the selected survey sites are reliable exemplars of common border-crosser landscapes in the Tucson sector.

In total, I spent over 400 hours in the desert during the months of June and July in 2012 and 2013. During this time, nearly 60 possible shelters were identified over roughly 25 distinct sites during archaeological walking surveys combing areas of the Sonoran Desert in Arizona. Over 600 artifacts of clothing, hygiene items, food and beverage items, first-aid or drug-related items were found in and around these structures [Table 3.2]. Out of the 60 possible structures, 32 structures were selected within 13 sites for in-depth analysis determined by their structural integrity (i.e. least degree of ruin), density of artifacts, the apparent intensity of occupant activity (with attention toward those most recently used), and location (seeking variance in ecosystem and topographical setting).

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<sup>9</sup> Humanitarian groups such as No More Deaths and the Tucson Samaritans go on frequent excursions into the desert to leave food and water for migrants and become familiar with commonly used migrant trails.

SITEID	TOTAL #	COLL.	GEND.	HUMANI	DRUG	WINTER	# BEV.	#FOOD	#PACKS	# SHOES	#CLOTHING	# HYG.	#HEALTH	#ENERGY	#ACC.
FP-1	8					X	1	3			2		1	1	1
OJ-1	10			X			1	7						1	1
DP-1	270	X	X				64	52	137	5	52	46	4		50
ESP-1	1														
ESP-2	5						2							1	
TH-1	27	X			X		3	13			1				
TH-3	2				X	X	1	1							
TH-4	10						4	3							1
GP	2					X					1				1
BW01	21		X					2			2				2
BW02	4														1
BBR	1							1							
CW02-R	9						3		2						
FF-1	12	X					2	4							
FF-2	59	X			X	X	1	15		1					7
FF-3	5						5							3	
FF2-1	4			X	X			2							
CWII-2	4						2	2							
WRM-2	47	X				X							1	1	
WRM-1	14	X					3	2	2		1				1
CWII-1	110						14	85			2	1		2	4
CWII-6	35	X					14	10	1		1			1	1
BTC	85		X				25	43			2			3	6
EA-B	28				X		9	25	2	2	1			2	
EA-C	2						1	1							
EA-J	16						11	4						1	1
EA-L	43		X			X	10	17	1				1	2	5
EA02-1	12						18	12		2					1

Table 3.2 Documentation of artifacts at each structure. EV and WV structures omitted. Across top, columns read: COLL (if artifacts were collected), GEND. (gendered items), HUMANI (brands of food, beverage, and packaging seen during fieldwork with humanitarian groups as as part of food drop), DRUG (usually burlap sack cloth), WINTER (cold weather items), BEV. (beverage containers), FOOD (food containers), PACKS (backpacks), SHOES, CLOTHING, HYG (hygiene items), HEALTH (medication, ointments, etc.), ENERGY (caffeine, red bull, and other stimulants), and ACC (accessories such as cell phone pouches).

41 interviews were conducted with 10 females and 31 males. These interviews were facilitated and funded by the UMP (IRB# HUM00060495) and co-written with Dr. De León. Out of these interviews, 11 were conducted in Altar and the rest in Nogales. Nogales was chosen as a field site for interviews because it is a receiving town of deportees and thus has two major migrant shelters. It is also the site of multiple American and Mexican humanitarian efforts (Red Cross, Grupos Betas, Samaritans, No More Deaths, and missionary groups). Additionally, Nogales has close proximity to the archeologically surveyed sites in Arizona the UMP had pre-existing and established networks to the migrant shelter.

While Nogales is a place migrants are deported to at the end of their (failed) journey, Altar is a town further south in Sonora where migrants prepare for the crossing. In Altar, migrants find their coyotes, purchase necessary border-crossing gear, and wait for a ride north to Sasabe or Nogales (both border towns). Altar is also a town with a prominent cartel presence (Collins 2014) so that conducting interviews there makes the overlapping relationship between the mafia, drug crossing, and human crossing more palpable.

Surrounding the time of conducting interviews, we stayed in migrant shelters and spoke to the workers and nuns who ran them, hearing stories about their own lives and the lives of the migrants they encountered on a daily basis. Other times, we sat at hubs of migrant activity where humanitarian organizations also congregated where we observed how first-aid, donations, and other kinds of help interfaced with deported and displaced border-crossers. We also travelled with Altar's priest to the border town of

Sasabe and visited *casas des huéspedes*<sup>10</sup>. These visits substantially expanded my understanding of the border-crossing process. More than anything, it revealed that border-crossers spend days, weeks, and sometimes months in transit through Mexico. This means that they are likely to exhaust their physical, monetary, and psychological resources long before they even try to cross to the United States. Additionally, my trips clarified the impact and role of the mafia (cartel) on border crossing, and the many obstacles, difficulties, and dangers that migrants face. These experiences were crucial in positioning the works of border-crosser architecture in a larger socio-political framework, emphasizing not only policy, but also the various actors and institutions that play a role in the desert migration process.

The UMP team found border-crosser architecture through pedestrian “transect” land surveying (Feder 2009, 54) predominantly in the Tucson and Nogales station subdivisions of the Tucson Sector. We hiked migrant trails for an average of six hours a day, five days a week, for seven weeks of the summers of 2012 and 2013. There are limitations to this surveying method, not the least of which is the sheer vast expanse of the desert which is difficult to cover on foot. While aerial surveying would show more trails over a wider surface area, it would not show which trails are active, and would not reveal clusters of artifacts (unless they are in a large enough group) or structures (because partly their design is premised on hiding from aerial surveillance). Furthermore, without the on-the-ground experience of hiking the trails, a substantial amount of phenomenological sensory data would be lost. Areas and trails for surveying were selected predominantly by the proximity to the border and taking care to

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<sup>10</sup> Directly translated, *casa des huespuedes* means “guest house,” but in reality are hollowed-out concrete buildings where migrants pay ludicrous fees to rest in squatter conditions before crossing the border.

investigate a wide range of terrain such as sandy desert, rocky cliffs, semi-arid hills, and so forth.

Each structure found in the desert was documented on a structure form (see Appendix A). Once all discovered structures were identified and documented, 32 structures in the Sonoran Desert were selected for in-depth analysis. Structures were selected according to their structural integrity (i.e. least degree of ruin), amount of artifacts, the apparent intensity of user activity (with attention toward those most recently used), and location (seeking variation across ecosystems and topographical settings). Structure measurements and descriptions were analyzed according to the builder's intent, comfort, cunningness, need for privacy or safety, compromise to environmental pressures, use and demographics, and temporality.

No measurement or described item is able to stand alone as conclusive evidence with regard to who built a structure, when this was, what they used it for, and what their motivations were. However, each documented quantitative number or qualitative description works as a fragment. Put together, these fragments do not miraculously form a coherent whole, but rather can create a trace of understanding, offering one or a few possible readings out of many.

### *Location and Landscape*

The structure form's first section focuses on location and landscape. With respect to specific sites and contexts, a range of qualitative and quantitative material was gathered. GPS coordinates enable a spatial mode of analysis that focuses on the proximity of structures to one another as well as to regional context including water features, roads, and other landmarks. The structure's general proximity from a visible



walking path was also noted as structures further from walking paths could suggest, among other possibilities, being lost in the desert or wanting to hide from any and all passersby.

Commonly observed flora and fauna are on the form in order to identify the general character of the landscape and site “affordances” (Gibson 1986)<sup>11</sup>. For example, mesquite trees grow in clusters and provide more cover for shade and hiding. Conversely, landscapes without grasses and with ash trees tend to be rather bare in the summer, affording less available cover. More moveable flora also implies more building materials for structures. Topographic location further enhances site affordance. For example, a structure built upon a ridge may be more exposed to surveillance, but also able to monitor all movement on the ground from a vantage point. During interviews, people unsurprisingly spoke of being tired traversing hilly terrain and so the relative degree of steepness or flatness of terrain was also noted to potentially infer the general level of physical strain one might experience walking in the area.

Also noted were any animals and insects present during structure documentation. During interviews, border-crossers often spoke about the dangers of animals in the desert. While fieldwork cannot always line up with the exact conditions when the structure was built and used, often times fieldwork can reveal forces and events that would otherwise be missed without repeated site visits and hours spent

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<sup>11</sup> An affordance, simply put, is what a particular environment, object, or substance offers to a particular animal. It is, in a way, a functional relationship. James Gibson uses the example of hard ground that is level and sturdy. Through its physical properties, it provides support and thus affords walking to a human. Change that surface to ice and the affordance of walking safely is removed. An object, such as a pair of ice skates, would afford the human the ability to once again move across a hard surface. Affordances are particular not only to the physical qualities of the environment, but also to who is interacting with the environment. Water affords an optimum environment for a fish to thrive, but does not provide the same mobility and survival to a human under water.

inside and around each structure. By noting the presence of fauna, a potential structure experience (comfort or lack thereof, for example) emerges.

In addition to seeing animals, interviewees also mentioned hearing various sounds in the desert which caused alarm. Sounds such as those of Border Patrol helicopters, rattlesnake rattles, footsteps, and drifting voices also play a crucial role in constructing the border-crossing landscape and thus were documented. Sounds can signal danger - according to Hamilton & Whitehouse, sound can have repercussions on sense of safety and orientation as well as on gendered spatial demarcation and use (Hamilton et al. 2006). During fieldwork, Border Patrol was directly sighted at six structures. At 18 other structures, cars, jets, or helicopters were heard but not seen. In particular, sounds phenomenologically inform research as to the level of anxiety or fear a border-crosser may continually experience as each sound can signal an impending threat of being discovered.

### *Artifacts*

The next section on the structure documentation form focuses on artifacts in and around the structure, listing commonly found items to be counted and entered on the sheet, as well as leaving a space for listing expiration dates found on artifacts. When structures were found and identified, the artifacts inside and within a two-meter radius of the structure's exterior were documented. The documentation of artifacts borrows heavily from the UMP's already established data collection methods. As with the other information gathered at structure sites, no interpretation of artifacts is without ambiguity. Thus artifacts were not used as conclusive, stand-alone evidence. Nevertheless,

artifacts can begin to inform the context in which people build border-crosser architecture, especially when cross-referenced with other fragments of information.

The location of found artifacts was mapped onto the floor plan of structures, and in the site plan if the objects were found outside of the structure's envelope. The location of artifacts (such as if they were inside or outside of the structure, partially buried or above ground, etc.) were noted to determine who had access to the inside of structures and the degree to which people worked to remain hidden from Border Patrol by burying items and hiding belongings.

The total number of artifacts found inside the structure, as well as the number of artifacts possibly associated with certain uses or people (e.g. gendered items like lipstick or menstrual items, items associated with pain or illness such as medicine or bandages, and so forth) were noted. Certain artifacts hint at the seasonality of the structure and its response to site and climate: heavier winter coats and gloves signal colder weather while lighter sports jackets and cut-off jeans suggest hot temperatures. Though artifacts loosely hint at who may have been in a structure and what may have taken place, they are far from establishing that with any certainty. Nor can one distinguish things left behind by those who build a structure from those who inhabit it. Expiration dates of artifacts in and adjacent to the structures were noted. When similar items, such as tuna cans, were found inside of a structure, their expiration dates and physical condition (amount of rust, condition of the label, etc.) were noted in order to inform the temporality of the structure. If groups of artifacts seemed to be deposited at different times, the structure was likely occupied multiple times.

## *Climate*

The structure form's third section catalogues climate such as wind direction, perceived strength of wind, as well as light and temperature measurements inside and outside of the structure. Particularly in colder seasons, wind can add discomfort and necessitate a structure's response to air movement. Even in warmer conditions, wind can kick up dust and debris in the desert, also warranting taking shelter.

Light has two strong associations in the desert: heat and visibility, both of which, especially during the summer, are to be avoided. Thus the degree to which any structure blocks or dissipates light is of interest. Light strength readings, measured in Exposure Value (EV)<sup>12</sup>, were taken 1) outside of the structure in the sun, 2) inside the structure in the sun, and 3) inside the structure in the shade. Light difference between the exterior and interior of the structures averaged from two to four EVs.

Temperature measurements were taken outside of the structure in the sun and inside of the structure in the shade. Most structures had a temperature difference where the interior was four to 10 degrees Fahrenheit cooler than in the exterior in the sun. Where the interior of the structure is hotter than the exterior, the structure's political and social considerations may have outweighed environmental ones as motivations for building; e.g. hiding from Border Patrol may outweigh physical comfort as a goal of border-crosser architecture.

These measurements not only speak to the ways in which border-crosser architecture responds to climate and offer shelter from inclement weather, but also

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<sup>12</sup> Exposure Value was measured with a photographic light meter. Although commonly used to determine a camera's settings for correct photographic exposure, the value helps establish the luminance of an area, and thus the brightness of a structure's interior and exterior light conditions.

begin to more concretely describe the experience of being inside the structures (e.g. a feeling of relief in the shade, or, a feeling of suffocating discomfort conditions). These can be thought of as “atmospheric” qualities of architecture relating to light, rhythm, temperature (as perceived emotionally and on one’s skin), and proportion to body are particularly relevant to phenomenological analysis (Zumthor 2006, Pallasmaa 1996). Quantitative measurements of temperature and light intensity were supplemented with rich description of qualitative features in field notes. The experiential investigations of physical form were structured by previously defined architectural phenomenological language such as perceptions of: insiderness/outsiderness, repulsion/intimacy, safety, light/dark, temperature (or ambiance), and familiar/strange (Thiis-Evensen 1987, Tuan 1986, Zumthor 2006).

### *Structure Specifications*

The structure form’s last section are the specifications of the structure itself. The physical attributes of the shelters were determined by a variety of measurements and observations detailed below. Through the documentation of physical form, one can infer designer response to ecology and culture. The ways in which border-crossers modify or altogether avoid traditional building techniques can be telling about the condition in which they build architecture.

Building materials were documented. Materials were later interpreted in terms of site affordance, in particular whether border-crossers used materials readily available on the building site or objects brought along from different locations. Building materials, and their density, also affect a structure’s durability and longevity as well as interior temperature and light conditions. The texture of a building materials, such as the thorny

quality of mesquite branches, were interpreted in terms of bodily experience or the degree to which a structure is attractive versus repulsive to a passerby.

The overall form of the structure was described in terms of construction number of rooms, and the direction of an entrance. The mode of construction (e.g. a lean-to, self-standing, etc.) not only points to site affordances (e.g. building off of an existing tree or wash) but also the level of exertion and time and energy a builder may invest in building a structure. Certain architectural elements afford different responses to environment. For example, a structure with a roof can deflect aerial surveillance, noon-time sun, and rain or snow fall. A wall, on the other hand, can work to deflect wind, on-the-ground surveillance, and the morning or evening sun.

The number of rooms within a structure can be interpreted in terms of environmental response (different rooms providing different protection from changing sun or wind directions, etc.) or social organization (a larger group breaking up to smaller units during a journey). The direction of an entrance can be entirely arbitrary, influenced by site affordance, or in response to surveillance or climate conditions. The overall condition of the structure was noted on a scale from apparently new to lying in ruin. This in part suggests some degree of temporality (older structures begin to decay over time), but also can be a sign of willful destruction (to cover one's tracks), poor construction, or a lack of re-inhabitation over time.

The maximum height, width, and length of the interior of the structure along with the interior circumference were measured. The volume of a structure can be used to infer number of inhabitants, use, and site affordance. Simply interpreted, some structures are physically too small for more than one person to enter. Other structures

are tall enough to stand in while others require people to sit or lie down at all times. These physical restrictions and affordances impact what people can and cannot do inside the structure: can one comfortably change clothing, sit upright and eat, lie together with a travelling companion.

### *Visual Documentation*

To supplement categorical and numerical data, the structures were visually documented. The photographs taken of structures in 2012 proved difficult to analyze when revisiting them after leaving the field site. Thus in 2013, I implemented a more systematic approach to document the structures. This included photographs taken: 1) from each of the cardinal directions 2) from the interior, 3) of any details such as artifact positioning, grass thatching, etc., 4) with a person inside the structure. Additionally, I took video footage to emphasize the three-dimensional massing of the structures from various angles and as experienced in time, moving through a site, including sounds (birds, vehicles, footsteps, etc.). I supplemented the photographs and video with floor plan diagrams to enhance the dominant shape and overall proportions of each structure, dimensions which were often obscured by layers of building material. While a good deal of research material was gathered quantitatively, because of variance across structures, the material was interpreted traditionally and hermeneutically. In other words, the culled data substantiates and informs interpretations rather than determining correlations or causation.

### *Interviews*

As Victor, a migrant who crossed the desert multiple times, said, "Each time [crossing] is different; you never know what is going to happen..." (De León 2012, 478).

By using a semi-structured interview, we could focus on topics such as the things border-crossers brought with them and the architecture they build. We asked specific open-ended questions targeting themes of border-crossing: 1) demographics and personal information, 2) border-crossing experience, 3) border-crossing objects, 4) desert and environment, 5) place and architecture, and, 6) other-than-migrant encounters. In addition, photographs of landscape, border-crosser architecture, objects, Border Patrol surveillance technology, and other common border-crossing elements were used as probes (De León and Cohen 2005) (see Appendix A for interview protocol). Questions were asked in English, simultaneously translated into Spanish, and then responses were given in Spanish, simultaneously translated into English. Each interview took approximately one hour. In some cases, when permitted, photographs were taken of the interviewee's sustained bodily injuries, clothing, and border-crossing gear. Interviews took place and were recorded in various locations including a migrant shelter, a bus depot, a basketball court near the border wall in front of humanitarian stations, and at the port of entry.

Interviews were subsequently transcribed and coded for contextual information including the border-crosser's previous life experience (job, other crossing attempts, time spent in the US, etc.), emotional and visceral content (injuries, tears, laughter, etc.), group composition (gender, age, number, etc.) and perceived coyote characteristics (benevolent, strict, rule-imposing, impatient, etc.). Transcriptions were also coded for information directly related to shelters and shelter building, including: social practices that occurred during building; surrounding climate and landscape; thoughts or experiences while inhabiting the shelter; and the expressed intent of



building. Particular attention was also paid when interviewees did not see or know of any structures in the desert, or if coyotes forbid the building of shelters. The omission or oppression of border-crosser structures is just as relevant as the manifested structures themselves; often what is not said carries as much weight as that which is disclosed.

The interviews thus elicit a larger picture of the border-crossers' inner lives as well as their interactions with other people and the built environment. They especially illuminate the more unconscious aspects of a border-crosser's experience, conjuring them with directive probative questions about topics that the subjects may not they themselves value or forefront in an open-ended interview.<sup>13</sup> This kind of interviewing can be termed "neo-positivist" in that the interview asks specific questions to gain concrete information and "romantic" in that the interviewer strives to be empathetic and to gain intimate knowledge of an experience (Roulston 2010, 52-56). In the analysis of the interviews, the content is approached in the "postmodernist" vein where the researcher also reveals her experiences and vulnerabilities as well as a critical look at any notion of singular or essential truths (Roulston 2010, 64).

The limitation of the semi-structured interview is that one probes with questions and thus it becomes difficult to gauge the worth or importance of certain things for the border-crossers themselves. If the interview instrument was to be unstructured, a narrative with more continuity and depth may be gathered, and this could in turn be analyzed for what elements the subject privileges (Feldman 1995). In other words, if a subject brought up the subject of building a shelter while crossing on her own without a

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<sup>13</sup> An open-ended interview gives the interviewee the ability to steer the interview wherever they would like as opposed to being semi-structured where questions posed by the researcher introduce themes but are not 'yes' or 'no' questions (Roulston 2010).

prompt, this would suggest architecture played a larger role in her experience and memory of border-crossing than, say, if she is directly asked about a structure and shown a photograph of one. At the same time, however, even border-crosser memories could potentially be formed by the larger border-crosser narrative (what migrants see depicted in the media about themselves, talk about amongst each other, etc.). Thus highlighting other events or objects during an interview, such as architecture, could evoke more specific, intimate, personal memories.

There are other inherent limitations to relying solely on interviews for information on the structures in the desert. In general, there are issues of accuracy, trustworthiness, and verification raised in all forms of ethnomethodology (Feldman 1995). Though one assumption of phenomenological research is that respondents will "identify their experience in a consistent and shared manner" and that there are underlying patterns and themes in subject's responses (Seamon 2000), it is possible that a researcher becomes biased by choosing subjects whose worldviews are most compatible with her own (and thus perceived as most legible) or that the patterns that appear to be most salient in the fieldwork are in fact those the researcher wishes to highlight. More specifically, in the context of the interviews in Mexico, it was nearly impossible for prolonged engagement with the subjects, or for that matter even a follow up interview; most people left within 24 hours of the interview, either to take a bus home or to cross the border again. Also, because we interviewed border-crossers who had been deported or involved in smuggling drugs (and thus weary of legal repercussions), many showed hesitation with certain questions, either evading, muddling, or seemingly

fabricating answers. Their vulnerability and their mediation of national laws gave them good reason to be suspicious of the interview.

Though many subjects spoke of building, inhabiting, or seeing structures in the desert, there is no way to formalize these into a kind of 'post-occupancy evaluation' (interviewing occupants of a specific built project sometime after initial occupation). The structures that are found in the desert are more than likely not the same structures that subjects talk about in interviews. Furthermore, one cannot interview or observe people in the moment they are building or using the structures because they are in transit and avoiding capture. Without the ability to employ direct participant observation, the interviews rely on subjects' memories and again can be heavily influenced by the particular questions that are asked in the interview instrument. The researcher can questions with certain answers in mind and as, "Questions always imply answers," the researcher inserts her biases into the interview protocol (Spradley 1980, 32).

The interviews still provide much needed insight into the perceptions and experiences of border-crossing from those who cross the borders themselves. While this dissertation privileges architecture as its topic and subject, interviews aid in curbing the instinct to elevate the structures in their impact and importance in the overall border-crossing process. Subject responses nest architecture in the hierarchy of other more expressed themes of survival, family, and social encounters and suggest a more relational importance.

## **Conclusion**

One of the strengths of a case study framework is the way in which materials, modes of analysis, and disciplines can influence one another and overlap. With this

research design, one can approach “complex social phenomenon” and “retain the holistic and meaningful” characteristics of real-life event (Yin 2009, 4). While the intersubjective paradigm may not provide numerical statistics or objective conclusions, mixed-methods can be used to ask a variety of questions of border-crosser architecture, thus bringing to light the highly messy and varied factors of border-crossing in the desert. Each research source has its own strengths and weakness and when cross-referenced with other sources, can reveal things not possible with a single source. For example, without interviews, the researcher can project meaning onto border-crosser architecture that is not consciously perceived or created by border-crossers themselves. The researcher, having a phenomenological bent, can see the structures solely as a place of refuge or healing. This undermines the discomfort and pain experienced by border-crossers, or the experience of political oppression. At the same time, artifacts can fill in lacunae left by interviews. While interview questions can steer people away from speaking about certain things or the fear of being an informant could dissuade border-crossers from fully divulging illicit or private activities, artifacts can point to drug use, false identification, or menstruation in the desert.

This broadens the context of border-crosser architecture, extending the boundaries of the sphere of influence impacting how, why, and where border-crosser architecture is built. By triangulating all of these multiple forms of documentation, the relationship between site, structure, and use can be more clearly understood and defined, while also being mindful of difference (whether in landscape, the experience of border-crossers, or the form of structures).

Because of the aforementioned complexity and indeterminacy of the physical data, the following three chapters of the dissertation focus less on the numerical or categorical data (although helpful and instructive) and more on the tension between these items, stories, and forms. The following chapter thus looks at how the social role of border-crossers and their architecture is both consciously reshaped as well as forcibly adulterated by circumstance. Chapter 5 interprets the data in the context of refuge, framing border-crosser architecture as a much-needed respite and response to a landscape of trauma. Finally, Chapter 6 investigates the political dimension of the borderlands, fore-fronting the ways in which border-crosser architecture mitigates power and conflict through various strategic maneuvers.

## Chapter 4 Social Roles and Rules

It was our first hike of the second field season. I was trailing behind a small group of Tucson Samaritans, a humanitarian group that goes out into the desert and leaves small deposits of food and water for migrants who may need it. The temperature was not even in the 100s yet and still, my body was having difficulty regulating. Even though the terrain was relatively flat, I was chugging water by the liter and my heart was racing. The Samaritans, mostly people in their 50s, were walking with far greater ease, apparently habituated to the landscape. At one of the drop sites, I surrendered and asked if my partner and I could wait there. The group would press on, all the way to the border, another mile or so, and on the way back, we would rejoin them. I sat down on a rock in a small patch of shade and I caught my breath and pulled cactus needles out of my shoes. I drank water and took some photos. Suddenly I heard a rustle and turned to see a young, tall, thin man running, halting to a full stop at seeing us, eyes wide, body fully tense and frozen.

We paused for a moment, assessing the situation. “Water?” he asked. “Yes, yes,” I reply, searching for my last remaining full water bottle. He asked who we were. He said he hadn’t been sure if we were “La Migra” or what. We said we were students. He asked us where he was, how far from the border, which way was North, how far away from a city he was. He said he had been separated from his group when Border Patrol ambushed them. He had dropped his backpack, and ran. Now he didn’t have

anything and did not know what to do. After thinking out-loud for a few minutes, he tearfully decided to turn back and we pointed him to the trail that led back to the border. He looked defeated, exhausted, scared. He left and we felt like we had been punched in the stomach – yes, we were tired and worn out from the hike, but we had supplies, we would go home in an hour, we could sit and rest without fear. The young border-crosser, on the other hand, was in a space where he had no sovereignty, no egress, no refuge. When we encountered one another, we were unsure of what space lay between us. Were we friends or foes? Were we in a temporary haven or at a site of violence? How did our encounter remake the borderlands and how did the borderlands deform and shape our identities? With the three of us together, the space was charged and intimate. When the young man left, the space felt suddenly empty and cruel. The same space was charged differently before the encounter, during the exchange, and after we parted ways. The collision of social roles (researcher and migrant) transformed my sense of landscape from a quiet, unoccupied, politically and emotionally neutral hiking trail into a precarious site, vibrating with an ominous sense of emergency, anxiety, and helplessness. The individual social roles and objectives we had altered the space we inhabited.

This chapter investigates this notion by asking, “To what extent can border-crosser architecture elucidate the relationship between social roles, social rules, and architectural form?” through the lens of structuralism as used in environmental design research.

What our encounter in the desert effectively did was to shatter the illusion that our relationship with the borderlands was fixed and universal. As Michel Foucault wrote,

“we do not live in a kind of void, inside of which we could place individuals and things...we live inside a set of relations that delineates sites which are irreducible to one another and absolutely not superimposable on one another” (Foucault and Miskowiec 1986, 23). Border-crosser architecture, like the landscape out of which it is built, is not a void. It is not a container where people, things, and activities are reduced into universal or transferrable entities. Instead, it is a shifting (at times even volatile) set of relations. The relations through which space is created are not simply conceptual but experiential, practiced, and material.

Canter's theory of place experience questions the ways in which an individual's position in society or within a certain social context can impact her relationship to space. He writes, “I wish to question the assumed dichotomy between environment and behaviour and replace it with a dynamic interplay between action and place... Central to these processes are conscious intentions shaped by a person's awareness of self and role in a given context. Intentions and actions are themselves structured by place related rules, negotiated with others, their outcomes reflected in expressed satisfaction with or pleasure in a given place” (Canter 1984).

This chapter explores the relationship between space and people and works against the concept of ‘space as container,’ instead framing space as a social process formed by materiality (physical things), ideas (emotions, concepts) and morays (rules and regulations). In other words, space and culture mutually shape one another. Through this framework, the following analyses focus on the ways in which border-crossing shapes, deforms, and reforms the social self and how this is reflected in border-crosser architecture's form, function, and character. Thus the following chapter



asks the question: To what extent do social roles inform the particular qualities of people's access to, construction of, and experience of border-crosser architecture?

Initially, the research sub-question was investigated by dividing border-crossers into four social groupings: migrants (those crossing North from the U.S.-Mexico border ranging in country of origin), *coyotes* (the guides who bring groups of migrants across the border, sometimes cartel affiliated), *burreros* (drug mules, often cartel affiliated), and *puntos* (look-outs stationed to communicate to *coyotes* and *burreros*). While this division is particularly useful if one were to pursue a typology of border-crosser typology where certain forms neatly indexed their discreet builders, the reality of the borderlands is far less cleanly ordered.

The border is far from a simple line in the desert. At times a barbwire fence demarcates the border, at other times a similar barbwire fence is erected by a rancher to contain their cattle. Homonymic fences bring on geographic confusions. Between this slippage between what is physically part of the border and what is not, the border is also constructed culturally and politically. Mexicans, whether on the border or deep in-land, often call the United States "El Otro Lado," or, "The Other Side." Linguistically, figuratively, and literally, the States becomes an ever present other space, the double or doppelganger which is just "over there," completely everyday and even banal, and yet at the same time different, foreign, and inaccessible. One's identity in the borderlands is mixed up in this duality. The US-Mexico border is largely constructed through a rhetoric of 'illegality,' framing the 'illegal alien' as "someone who is officially out of place in a space where she or he does not belong" (Nevins 2005, 11)<sup>14</sup>. In a shifting boundary

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<sup>14</sup> See (Sundberg 2008) and (DeGenova 2002) for further discussion of the rhetorical construction of the 'illegal immigrant.'

condition, the border-crosser's identity can be as ambiguous as the threats to her safety. Is the migrant a welcomed laborer, a perceived terrorist, a hated *other*? Will she fairly easily pass through a tunnel, a port of entry with false documents, or will she walk miles in the desert being swarmed by helicopters or invisibly surveilled with infrared cameras? At any point, the physical location of the border as well as the identity of the people who inhabit that space is ambiguous.

While structures built by border-crossers still lend themselves more to certain activities and goals than others, most structures are flexible enough to offer multiple uses for various people. Moreover, while there are sometimes rules in the desert passed down through word of mouth about who can and cannot build structures (more discussion on this theme later in the chapter), these rules proved inconsistent across our interviews. What remains is a great deal of ambiguity. Inconclusive evidence may at first appear to be a failure while investigating what structures are built by whom and for what purpose. It may even seem to undermine theories that suggest that architecture can clearly reflect one's social role. But in fact, the mutations of border-crosser architecture emerge from the mutations of social roles and rules during border-crossing. In other words, the structures are difficult to code, differentiate, and pin down because the process and business of border-crossing is loosely structured, elusive, and adaptive.

One must imagine the border not as a line over which one passes going from point A to point B, but instead as a field of distortion which scrambles signals, much like the sounds from a radio dial as it moves across stations. Sometimes there's pure static. Occasionally a clear voice emerges, only to be moments later overlaid with another set

of voices. Border-crosser structures are much like these stations along the radio dial: they broadcast, with relative degrees of clarity, the transmissions of people in passing.

### **Rules**

While social roles in the borderlands can be fluid, rules set forth by various institutions, formal or informal, create distinctions among border-crosser groups. In other words, rules and practices codify an 'us' or 'them.' While social roles can be determined by different goals, rules can further cleave groups apart: "... moments when coyotes and migrants have distinctly different goals (profit, versus successful immigration) and when the practices of the United States Border Patrol have actively driven wedges between these groups" (Slack and Campbell 2016, 1389). Border Patrol and U.S. policies have worked to differentiate border-crossers into categories like migrant, drug smuggler, or human smuggler. While all three groups violate the same law of unauthorized border crossing, under the Coyote Law (SB1372) passed in 2005, guides are classified as human smugglers and receive harsher sentencing during deportation hearings (Sanchez 2015). During fieldwork, we were told that certain objects like compasses or weapons are used as evidence by Border Patrol to label someone a smuggler. This puts migrants between a rock and a hard place. A migrant may desire carrying a knife to protect herself against possible assailants, but if caught by immigration, she will likely be tried as a drug mule or guide. A migrant may want to bring a map or compass in case she is abandoned or her guide gets lost, but if caught by immigration, she would be identified as a guide. In this way, laws become social rules that impact the on-the-ground choices that border-crossers make in order to avoid being identified as part of a certain group.

Between border-crossers and humanitarians, rules are less explicitly set forth and thus confusion can arise. Humanitarians affiliated with the Tucson Samaritans and No More Deaths leave water bottles and food in the desert to help migrants, but these objects can be perceived as dangerous traps. Fernando, 43, from Oaxaca, when shown a photograph of a humanitarian 'drop,' said: "If we see them [groups of bottles] we don't take them. Because some people say that sometimes immigration, they leave them, and they have something that puts you to sleep. So you're sleepy and then they come and get you. So the coyotes say don't touch nothing." Sebastian, 38, from Michoacan, also was weary: "...there are sensors there [on the paths] that La Migra puts. And in the water as well they put sensors. If you see bottles with water don't pick them up. Because if there were ten [bottles], and then one [bottle] is not there, they know somebody went through there." Even though the intention of humanitarian water bottle drops is to aid migrants, social rules created by guides and migrants codify these objects as Border Patrol tactics to disable and detect migrants.

Some have focused on the ways in which social roles and rules have been largely crafted for the sole purpose of moving drugs across the border, that there is now a "...de facto hierarchy based on the power and profitability of specific clandestine activities (in this case drug trafficking is the dominant criminal activity)... an illicit regime of narco-governmentality, one that functions in opposition to or in collusion with the law and whose basis is survival, profitability and evading arrest... there are specific rules set by the most powerful actors" (Slack and Campbell 2016, 1382-4). Since there are overlapping groups with different social and purposive roles (e.g. moving drugs, or different migrant groups), code words and whistles are common tactics to communicate

rules to one another. Luciana told us “When you’re crossing, they give you a code word, and if you hear another code word you have to stay down until you hear your own. You have to wait to hear the right code word and listen for the other people.” This highlights the way in which border-crossing has become a kind of industry with organized groups, leaders, modes of communication, and established regions and protocols.

In our interviews, most respondents prepaid at least fifty percent of their crossing cost to their guide before crossing. Because of this initial investment, migrants are a lower financial risk than burreros who are carrying marijuana merchandise worth thousands of dollars but which has no worth until successfully handed off in the United States. Sebastian framed the inequality like so: “For every backpack [of marijuana] there's 40,000 dollars for drugs. You don't think they're [guides] gonna take care of them [the drug mules] more than one person [migrant]?... When one person [migrant] goes through and they only get 1800 dollars.” Devaluing migrants has practical consequences in the desert. Migrants have reported to us that at times, if there are Border Patrol agents present, a coyote will tell the migrants to run to serve as a distraction. The migrants are apprehended by Border Patrol while burreros and guides make a break for it during the chaos. Thus migrants take up the lowest rung in the hierarchy, being used as Border Patrol bait to protect the drug load.

While moving drugs can appear to be a powerful factor in creating social rules, it is also important to note that being involved in moving drugs does not guarantee an esteemed social role. One burrero interviewee, Emmanuel, light-skinned, tall and sinewy, 50 years old, tattooed and dressed like a Los Angeles greaser with slicked back blonde hair, seemed to be worn down and exhausted. He lamented that he was being

exploited by the cartel but that he had few other options to make money for his family in California: "I had to put on the backpack. I did it twice. I had no other opportunity." He spoke about how disorganized the entire operation was, how his guide had good food while Emmanuel had nothing, and how he saw other drug mules in the desert whose guide had outfitted them with brand new camouflage clothing while he had to wear his old clothes. Not only did he frame his experience as one of lack and exploitation, but he also said he was misused and uncared for: "[When we were walking] I fell. And as I fell the guide was behind me and he goes: 'You have to get up.' And I said, 'Well, if I could I would... don't worry about me, I'll catch up or something.' He goes, 'No that's not the way it goes, baby' ... he starts kicking me." Even though Emmanuel is carrying valued merchandise, he is treated like a stubborn mule, kicked and prodded with no regard for his well-being.

Social rules can impede one's personal purpose and sometimes these rules are impacted by money. For example, the amount one pays to a guide can influence one's success in crossing. As Joaquin summarized, "What happens is that the guides... they say, you know what, I'm gonna charge you this much to get you through this space. Or they charge you less to go through this other way. It's more dangerous to pay less than to pay more." Joaquin's guide would charge him more to go through an area that was easier to pass through. In this case money, or lack thereof, could seal one's fate in the desert, or at least can increase or decrease risk of being apprehended or abandoned. One guide was reported to take nearly hand migrants directly over to Border Patrol; one woman said with surprisingly good humor that her guide brought her to the border wall, told her to climb it, "Like a monkey! A monkey, can you believe it?!" and then, as she

climbed down on the other side, a U.S. Border Patrol agent was waiting for her, shaking his head, and said to her, “Lady, you need a better *coyote*.”

Beyond access to certain routes across the desert, is it also necessary to remain undetected in the desert so some people wear camouflage clothing. Some migrants are banned from wearing the clothing as it is designated for drug mules. Nicolas, 37, from San Pedro, said there are rules against wearing certain clothing: “...you can't touch any of the clothes of the assassins because they use soldier stuff. I made a big mistake to put on a hoodie that was camouflaged and the guide said no no no, that's not what you use. That's what they [cartel members] use... the drug smugglers use it.” In this case, a guide kept migrants from wearing clothing that could potential help them evade Border Patrol. This suggests rules set forth to uphold narco-governmentality where certain objects (in this case, types of clothing) are reserved for certain purposes. However, other migrants whom we interviewed told us they wore camouflage and made no mention of drugs or the mafia. Thus while there are rules set forth by guides and other migrants about who can wear what, these rules seem to vary on a case by case basis. Social rules often dictate who gets to build and where and these rules are reflected in the form and siting of border-crosser architecture. Out of our interviewees, sixteen (approximately one quarter of respondents) said they built or used structures in the desert. Out of those sixteen, seven built them with guides, three re-inhabited structures with guides, two used the structures while moving drugs, three built them only on the Mexican side of the border, and two built structures when they were alone and without a guide. In other words, out of those who built structures, it was most commonly done with a guide.

Sometimes structures are never built and this absence of architecture also reveals an important relationship between role and building and power and landscape. Guides set up social rules for the migrants so that the group is less likely to be detected by Border Patrol. People we interviewed mentioned various such rules forbidding one to: talk or make any sounds, use a cell phone or even have it powered on, leave footprints, and touch or move anything in the desert. Since architecture leaves physical evidence of occupation, guides will sometimes ban migrants from building. During interviews, two migrants said that they were explicitly forbidden from building or using structures. Luciana, age 22, told us, “No, we weren't allowed to build anything because it was like leaving a sign behind.” Other times, migrants are told by their guides that the structures belong to drug mules and they should be avoided. Other times, while guides may not ban building, the conflict with people moving drugs or points prevents migrants from using structures. Martina, a young woman, also told us that she saw a structure with drugs inside and that she did not dare go near the structures because, “They are outside in a tree watching with an AK-47. I was scared. I ran, ran, ran...” Thus while a structure’s form and siting are dictated by its purposive role (to cloak and protect a person and/or drugs), its use and inhabitation is also controlled by social rules sometime enforced with threats of violence and arms.

While access to border-crosser architecture may seem reserved or prioritized for drug mules, it is important to note that social roles and social rules do not neatly correlate with one another. Bruno, one migrant who said he “put the backpack on” (moved drugs) to help pay for crossing said:

B (Bruno): The narcos bring them [black plastic bags], they put together the branches, they make that [a structure]. The mafia will hide backpacks underneath there.



A (Author): Did you use the structures?

B: Yea, we hide the backpacks so people don't see the drugs at night...

A: Have you built these before?

B: The mafia builds them. They are called 'puntos' [points].

In Bruno's explanation, there is an overlap between how one structure is used and modified by various social roles and how he situates himself between them. Bruno differentiates himself from the 'narcos' and the 'mafia' even though he himself is carrying drugs. He says that he uses structures built by points and modified by drug mules. Because he is moving drugs, he is granted access to the structure but he does not build or modify it, nor does he affiliate himself with those who did. This not only reveals the complexity of self-identification, purposive role, and access to building, but also explains how the form of structures and the artifacts inside of them tell various and often competing stories about who was there and for what purpose. As Bruno himself said, "Every head is a different world," and in the same way, every structure becomes a different world.

As with any set of rules, people can adapt to them, undermine them, or explicitly break them. Some migrants circumvent or even boldly go against social rules. When they were left behind by a group, a couple we interviewed said they fashioned a makeshift shelter. Although abandoned and afraid, they were also no longer subject to the guide's rules and could do as they pleased (or rather, what they needed). Other migrants take more active roles in their fates, standing up to their guide and working to help others in the group, especially when it becomes obvious that the guide is

disoriented<sup>15</sup>. Santiago went so far as to change his group's course: "I was mad at the guide. I said, 'You know what? You want to keep going through all the places but it's not ok. Let's all go on this path. And if you go a different way I'm not going to follow you.'"

This shift of power indicates an instability and tension in the social roles among migrants and guides. Even without conflict, social roles and border-crosser identities are complex, overlapping, and fluid. Thus it becomes useful to add in another dimension of the purposes or goals of each group or individual as a way to understand how border-crosser architecture functions in service or opposition to the various rules in the desert.

### **Purposive Places**

Simply put, the shared goal of nearly every border-crosser is to make it across the border. To do so, concerns are ones of basic survival (don't get hurt, don't get left behind, don't die) and success (don't get caught and deliver yourself, others, or drugs to a destination). There are of course nuances to these goals. Where border-crossers come from, their previous experiences, and their fears and motivations concerning migration are all factors that link their social role (who they are in relation to other people in the borderlands) to their purposive role (what they expect and need from a place to attain their goal of successfully crossing). In this complex interplay, different goals take different priorities for different people and this creates a different space: "... experience of a place is a reflection of the degree to which the place contributes to objectives a person might have... the facilitation of those objectives and hindering of

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<sup>15</sup> For an in-depth discussion on the ways in which migrants stand up to their guides and are able to attain power through tactics such as "bounded solidarity" against Border Patrol, strength in numbers, and communal ties controlling a *coyote's* reputation, see (Spener 2009, 193).

them” (Canter 1983, 667). The architecture built out of each individual context reflects these relational realities.

The character of border-crosser architecture can veer from being a humble act of desperation to an ornery territorial marking. By the texture of the architecture’s envelope, we can glean whether it privileges bodily comfort (such as with soft dry grasses padding a rough dirt floor) or mental comfort (knowing that while prickly thorny walls may not feel particularly good, at least they will deter others from encroaching). By the size of the architecture’s footprint, the durability of the structure, and the topographical position, we can sometimes deduce whether the structure is planned to exert and present power over the landscape (as with larger, densely constructed architecture on top of a ridge) or whether it is haphazardly and spontaneously fashioned out of immediate necessity (as with bent-down branches, unthatched walls, and largely un-enclosed spaces). In these ways, the social roles of the drug mules, migrants, and guides may in part echo throughout the personality of their architecture.

## TH-01



Figure 4.1 The western room of TH-01.

Sited in a small valley between two hills, TH-01 is shaped like a figure eight, comprised of two rooms are scaled similarly but are built out of different materials. The western room gracefully sweeps into a crescent shape, thatched almost completely encircled with long, wispy grasses [Figure 4.1]. It lacks any rock foundation and instead relies structurally on long, thin, y-shaped branches which reach out diagonally from the ground and rest their crotches on the trunk of the supporting mesquite tree. The roof is fashioned from velvet ash branches, imported from a dead tree about fifteen meters away. Walking the branches over to the site takes more energy and time which suggests the builder had to invest. The eastern room, on the other hand, has a pronounced ring of large rocks, even extending out to create a symbolic entrance path.

The entrances face different directions, one to the North-East and the other to the South-West [Figure 4.2]. In this way, the two rooms are able to provide complete protection from the sun as it moves across the sky as well as possible surveillance sweeps by Border Patrol. One possible interpretation of this design response to the sun is that someone used the structure for longer than twelve hours. Most migrants we interviewed stated that they rarely rested for longer than a few hours, or at most, over night. People we interviewed who were crossing drugs, on the other hand, mentioned that at times they had to wait long periods of time until Border Patrol cleared the area. Cross-referenced with other indicators, TH-01's ability to protect the body from the sun for a 24-hour period may suggest that the structure was used by someone crossing drugs.

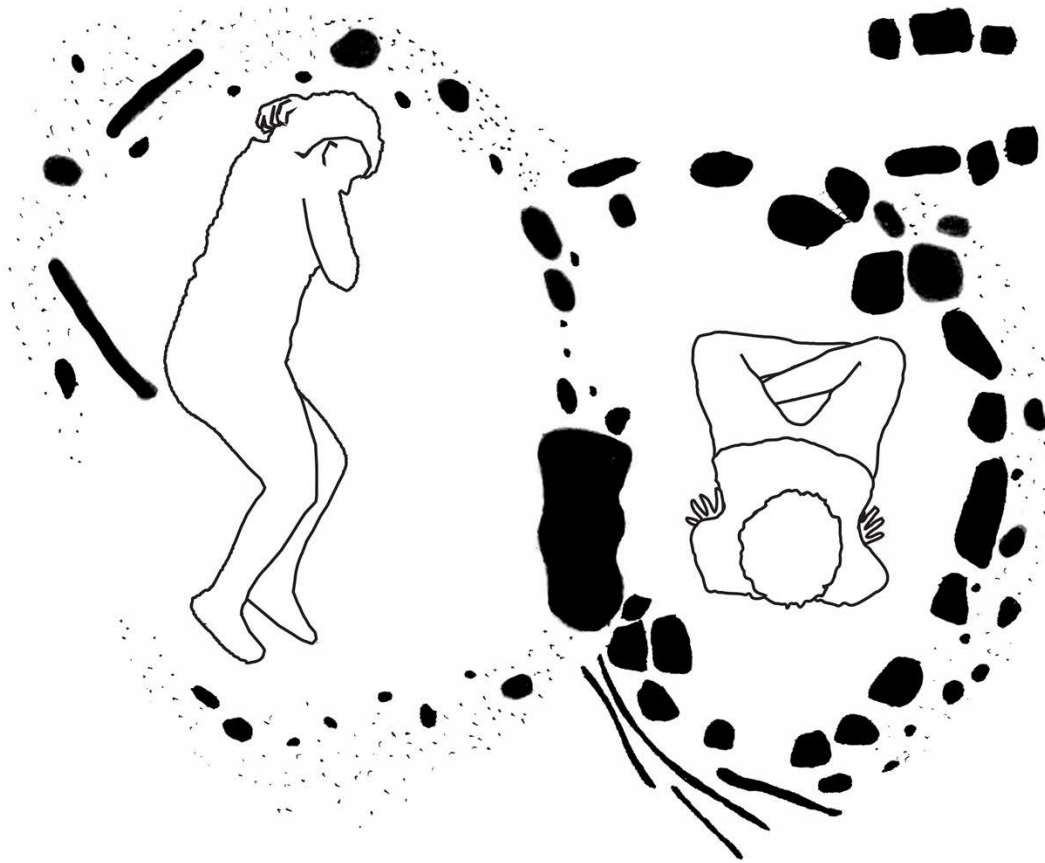


Figure 4.2 An aerial 'floor plan' of TH-01 with two rooms. Human figures added for scale and perspective. At right, the eastern room is defined by a circle of rocks and branches. At left, the western room is defined by a ring of grasses and branches. North is up.

Another indicator is a burlap-sack-covered gallon-water container, found in the western room. This added covering was likely added either to keep the bottle's white walls from reflecting light or trying to keep the water from boiling from the sun (for an in-depth discussion of water bottle adaptations, see (De León 2012)). Burlap cloth is used to make 'mochilas,' or 'backpacks.' People wrap large, rectangular parcels of marijuana and add nylon string and strips of burlap for shoulder straps [Figure 4.3]. Thus while not solely used by drug mules, the presence of burlap nevertheless increases the likelihood of a drug mule's presence in the structure. The size of TH-01 is particularly well-suited



for either a solo traveler or a small group carrying drugs. The people we interviewed who said they carried drugs reported they travelled alone or with a group having two to ten members. Migrants have reported crossing alone, either because they were so familiar with crossing or because they were abandoned by their group. More commonly, however, migrants reported being in group of ten to twenty other migrants during their 2012 or 2013 crossing. While smaller-sized structures do not conclusively rule out migrant use, in the case of TH-01, the rooms built for one person seem to further suggest its primary use for moving drugs.



Figure 4.3 A group of three 'mochilas,' or drug 'backpacks,' found under trees near the WRM site. The parcels of marijuana are wrapped in burlap and secured by yellow nylon rope and are reported to each weigh around twenty-five kilos (fifty-five pounds).

Structures can also be built to house the large parcels of marijuana. As Bruno said, “We hide the backpacks [in the structures] so people don’t see the drugs at night.” The dual-room organization of TH-01 can alternatively be read as having one room built for human inhabitation and the other, to hide the load. The eastern room is more densely covered and is far more difficult to enter, which would protect the drugs from being easily accessed or spotted. Nevertheless, artifacts were also found stowed neatly in between the ring of rocks inside the eastern room such as a candy wrapper, an empty small plastic bottle, and a scrap of burlap sack. This suggests someone was inside the structure eating and drinking, with or without a drug parcel, yet does not negate the possibility of also housing drugs at some point. Flexibility and adaptation are both necessary qualities of border-crossing and border-crosser architecture in order to remain invisible and to persevere through adverse and changing conditions.



*GP-01*



Figure 4.4 GP-01, a structure sited on top of a ridge. At right, the interior of the stone wall. Outside of the wall, a pile of firewood. Inside the wall, a fire pit, slightly dug out containing ashes, with rocks on top.

If TH-01 is graceful, hidden, and flexible in its siting, form, and materiality, then GP-01 is quite the opposite: bold, brash, and stalwart. The structure is complex and sturdy, suggesting it was meant for longer-term occupation and re-inhabitation.

Destroying the hut would take as much effort, if not more so, than constructing it. Its walls are thick and thatched into an impenetrable dome - the floor is covered with dry grasses and on its northwestern side, a small wall houses an even smaller fire pit, to deflect the heat back into the structure while limiting the visibility of the flame [Figure

4.4]. This not only shows ingenuity in the design but also suggests experience in border-crossing and building. Daniel, 29, from Pochutla, when asked who builds structures in the desert said that, “Those who already know well know that the night is cold, and the helicopter that goes around.” The structure responds to various contexts such as varying temperatures and Border Patrol tactics. While doing fieldwork, a Border Patrol helicopter flew in from the southeast, and this is the direction of the structure’s densest walls.

GP-01 is well-camouflaged, thatched with branches and leaves and surrounded by a small group of mesquite trees. Nevertheless, it is sited on the top of a ridge and near a road frequently used by Border Patrol vehicles and thus its priority is surveillance, not cloaking. The entrance faces southwest, and affords a stunning view over the valley and other mountains, as well as the nearby road where Border Patrol SUVs roam, or pull off and park in wait. If the structure’s main function is surveillance, it is likely to have been used as a ‘point.’ A young man, Felipe, age 22, explained in English:

Um... Well... they have what they call 'points' out in the desert. Guys on the top [of mountain ridges] with radios that have binoculars and all that, that are watching. So they know where we're headed and so if they see a border agent headed toward us they'll let us know so we can try to hide out or try and take a different way.

During interviews, the term ‘points’ or ‘puntos’ were used interchangeably to name both the structures and the people within them. In other words, the person’s purpose linguistically becomes synonymous with the place they build and inhabit. Points are lookouts. They defend, orchestrate, and communicate to people moving migrants and drugs through the desert. As people, points engage in counter-surveillance of Border

Patrol and choreograph the movement of people. They have more experience and knowledge of terrain. Emmanuel explained the detail of a point's intimate knowledge of Border Patrol tactics of surveillance:

The sensors and stuff at night... the point is telling you: 'Hey, there's a thermal there, there's a camera there.' He tells you how to avoid it. That's what they're there for, to make sure we're not getting caught by immigration.

Some of this knowledge can arise out of experience in the desert and some out of the apprenticeship that we were told many people undergo before becoming guides and mules. More familiarity with the desert and more time spent perched in one location may suggest greater confidence in the borderlands. If one knows the date and time of Border Patrol's rounds, then one can prepare and adjust accordingly instead of being vulnerable and easily taken by surprise. If points are indeed empowered by this knowledge, then it would make sense that structures built for and as points are more durable and less makeshift. Longer term occupation of structures affords more comfort. The design of structures can be born less out of immediate and desperate responsiveness and more out of deliberate and strategic thought. Thus points, as structures, can establish territory, taking land and marking space.



## BW-01



Figure 4.5 The interior of BW-01's large room. Various artifacts such as Electrolyte bottles, a glove, a rusted tuna can, and a discarded badly faded jacket are discarded on the floor.

While BW-01's walls are also deftly constructed like GP-01 by interlocking vertical Y-shaped branches, the structure's form is less articulated. It has two rooms, like TH-01, yet the two rooms differ dramatically from one another: the larger room is largely free-standing except for borrowing some support from the mesquite tree while the smaller room is made essentially a lean-to with a constructed ceiling. The larger room offers almost an entire enclosure while the smaller room gives primary protection from above and from the northwest. The varying scale and style of building between the two rooms, along with varying degrees of grass regrowth on the floor of the rooms,

suggest they were built and reused at different times and possibly by different people and for different purposes.

The wide range of expiration dates on the tuna cans and electrolyte bottles, as well as the varying degree of rust and decay of those artifacts, point to re-inhabitation over a stretch of some years [Figure 4.5]. Structures that are used multiple times can point to the structure's function as a landmark, built to endure over time so that it can be used for orientation. When asked who built structures in the desert, Arturo, 31, from Chiapas, said: "The guides built them [the structures]. Sometimes they are markers for the guides so they can go back to where they were before." Ramiro, 23, from Guerrero, when asked how his group navigated the desert, said his guide seemed to know where the structures were and took his group specifically there to rest. If BW-01 were used as a waypoint for migrants, that would explain the repeated use of the structure and the palimpsestic layering of non-contemporaneous artifacts. The structure would aid guides in orienting the desert and getting migrants safely across the border.

While some migrants boasted their ability to orient themselves in the desert, most said they blindly followed their guide and had no idea where they were at any time. Ramiro, 23, said "The guide just told us to follow him and we followed him. You need to keep walking or you'll get lost." In addition to not having experience or access to navigation information from points, dehydration also affects cognition, further disorienting migrants. Carlos, 18, said, "My head did hurt and I was like a zombie, like I didn't think anymore. I was just following the guy in front of me..." In order to avoid being caught by Border Patrol, groups often move quickly across the desert, but this also leads to exhaustion which can lead to becoming ill or injured and eventually becoming

separated from the group. Martina's experience was similar to this, "Going in the mountains up and down, up and down. And everybody else couldn't take it so the guide abandoned them. I also couldn't take it anymore. I tried again and my toenails fell off." She was also eventually left behind.

Twenty-seven people we interviewed spoke about the fear of being left behind by the guide or group, encountering people who had been left behind, or being abandoned themselves. To counter this obstacle, one strategy may be to seek bonding among a member in the group as a way to stay together. A shelter that is larger can house more people and thus facilitate bonding through physical proximity and social interaction. The northern room's larger size, approximately five and a half meters squared, can accommodate about eight people lying down or six people lying down. Nicolas spoke of bonding and resting together: "You talk a lot with [the people in your group]. You take care of each other, have each other's back. When we rested during the day we'd all be there. According to the guide, we had to lay down like cows, make one group, so we wouldn't leave any marks." Beyond the goal of camaraderie, staying together also has the benefit of taking up a smaller footprint in order to remain hidden, thereby also decreasing the likelihood of being spotted by Border Patrol.

Bonding can also limit one's susceptibility to violence. Where migrants come from often has a relationship to why they risk an unauthorized border crossing. In 2012 and 2013, about fifteen percent of apprehended border-crossers in the Tucson sector were other-than-Mexican nationals (United States Border Patrol 2012, 2013), predominantly Central Americans. While Mexican nationals are most likely to cross the border illicitly to seek economic prospects, Central Americans migrate to flee political

and gang violence (Massey, Durand, and Pren 2014). While Mexican migrants do not often cite political or neighborhood violence as a determining factor for crossing to the United States, Mexican female migrants<sup>16</sup> have reported crossing in order to escape physical and/or sexual domestic abuse (Parson and Heckert 2014). Thus whether in the realm of the public or private, whether from Mexico or Central America, migrants can have intimate encounters with violence which drive them to escape their home to seek safety. An architecture she builds or inhabits would work toward that goal and have qualities that offer physical and emotional respite (see Chapter 5 for an in-depth discussion on refuge).

If a migrant does becomes abandoned by the group and becomes disoriented in the desert, creating a shelter to eat and rest while waiting to be rescued can be of help. A shelter can provide a space to rest and restore one's capacity to keep going. In order to rest, tend to one's wounds, recline, and change clothing, a structure must be large enough to accommodate a body's full range of motion, or at least a body in various postures. Judging by the placement and nature of the surrounding artifacts in BW-01, one or more people ate, rested, changed, and nursed wounds inside this work of border-crosser architecture. On the structure's floor, there is a deodorant stick, a tube of hydrocortisone, a discarded jacket, and a bottle of Wildroot hair grooming liquid. Here, a traveler's desert skin was shed as they changed into clean clothes and tended to hygiene. Not only can the structures provide a place to rest but it also can allow for a ritual space to groom and domesticate the surroundings and the self.

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<sup>16</sup> During the time of and around fieldwork, twelve percent of migrants apprehended in the Tucson sector were reported to be about fifteen percent female and eight-five percent male (United States Border Patrol 2012, Martínez et al. 2017).

In order to cross successfully, one must survive. Violence and fear of harm not only can influence a migrant's initial motivations *for* border-crossing, but are also primary concerns *during* crossing. Gabriel summarized the dangers: "The bajadores. The dangerous animals. The sun. The water could run out. The food... and if you don't pay [the guide] then he maybe kills you or shoots you or something... There's a lot of danger and you risk your life." The threat of violence and physical harm, the fear of being left behind and lost, all become a pervasive backdrop to any migrant's journey and thus is a dominant aspect in the purposive role of a migrant. BW-01 is a structure that could provide orientation, a place for bonding, restoration, and in general, some degree of safety.

### **Shapeshifting**

While the previous sections outlined ways in which structures may be more or less well-suited toward certain groups of people for certain purposive needs and outcomes, these analyses are not intended to work toward a typology or a definitive correlation between form, function, and designer. The reality of the desert is rife with ambiguity and the shapeshifting of identities. Just as structures are re-inhabited, modified, destroyed, and cloaked, so too do the border-crossers and their artifacts adapt, react, and mutate. Border-crosser architecture not only reflects these processes but also can aid in ruses.

Some border-crossers, especially non-Mexicans, consciously project different national identities. They can do this by simply claiming to be Mexican, hiding their accent, or by carrying false identification. Being Central American can have a price, whether it is higher fees, facing more violence, or being deported across multiple



borders (Vogt 2013). Luciana, from Puebla, explained how the cartels charge different fees for crossing and would harm people who tried to pass for Mexican: “For Central Americans, it’s a different price. They ask you questions, they find out if you’re from Mexico or not. In my group there were two people from Guatemala and they were trying to pass as Mexicans and the mafia went directly to the house and asked questions and asked for their IDs. When they realized they weren’t Mexicans, they beat them up.” Some Central Americans go so far as to assume the identity of another person and even devise an alternate family and a new home place. Nicolas, 37, from Honduras explained how he formed his new identity: “Yea, I brought false documents from one person who had died. And it made me very scared... A woman got them for me in Sinaloa. She told me that now I was from that town. If anything happened, to tell immigration to call her and she would pretend to be my mom.” When we asked Gabriel, 23, from Honduras, why he traveled with a driver’s license from Mexico instead of his national identification card, he said, “Because I didn’t want them to send me back to Honduras. But you can cross again more quickly if you’re just sent back here [to Mexico].” Because of these shifts in documents, narratives, and self-presentation, border-crosser names, countries of origin, ages, and so on can be masked.

People continually shift their identity and this is echoed in the things people carry and leave behind in the desert. It is difficult to distinguish what belongs to whom and what purpose an object serves. Border-crosser’s possessions change hands often. They can be passed from one migrant to another, bought for a migrant by a guide, given to a migrant by an American or Mexican humanitarian organization, or simply found en route. During fieldwork, one woman was observed waiting at a bus station in Nogales,

Mexico for a bus back to her hometown after a failed crossing attempt. She wore a "Smile. Have a Coke" t-shirt while her face told a different story, one of thirst and sadness. An amused humanitarian translated the shirt to her and she looked down with a confused expression on her face, seemingly finding the message and the conversation painfully trivial compared to her greater concerns of contacting family and organizing a way home. She said simply, "Someone gave this to me." Artifacts often change hands so that even tags such as "Hecho en Mexico" or "Made in the USA," due to globalization but also humanitarian donations, inconclusively express national identity.

Sometimes, objects become an active architecture of identity deception. Camila, a young woman of 18 we interviewed in Nogales, carried with her a menu from the restaurant where she used to work. Inside, she hid her identification documents so that the coyote or Border Patrol would not be able to take them from her. The proof of who she was concealed, housed inside something that did not describe the contents. Like the menu's envelope, clothing also works to shield its contents. Women frequently wear men's clothing likely not only because sports wear is frankly more practical and comfortable, but also to conceal their sexed parts to lessen their chances of getting unwanted attention from males in the traveling party. Gabriel, when asked if it was different for women than men while crossing, he responded, "There are many that take advantage of women. The guides or the polleros, if they [the women] don't do what they [the guides] say, then they [the guides] leave them [the women] stranded in the desert." In order to mitigate this danger, women sometimes dress in more masculine clothing or bind their breasts.

By forging alliances and fabricating identities (being a wife, a mother, a sister), women are able to appeal to an assailant's fear of another man's retribution. Marianna described that a group of men came out of the desert and they brought, "big weapons...Knives. They undress you. They come covered." We asked if they undressed her. "Me? No. What happened was I came with my nephew and he told them that I was his wife." These feigned partnerships can be further consecrated spatially. At the EV site, many structures in varying conditions (some lay in ruin, some more recently used) are built fairly close to one another. EV-02 is a structure at this site, constructed under a large tree. The space underneath the tree is divided into rooms with bent branches and grass thatching. Each room is about three and a half meters squared in area and can accommodate three to five people laying down or sitting. This floor plan of the shelter suggests a group traveling that could break off into smaller units. In this spatial arrangement, each pair of people can have their own room while still being in the same group 'building.' Natalia, 34 years old, from the state of Mexico, described such a structure to us: "To sleep you would look for places that were very closed in. We separated - two people, two people here. And at night we would sleep around three hours." While Marianna said her group was walking too fast and did not rest long enough to build a structure, it is possible that were she to share a room in the structure with her nephew, this would further assert the story she told claiming him as her husband and thus offer her continued protection.

Not only can women fake relationships, but so too can women alter their gender identity in order to avoid and deal with violence. After recounting an experience where she witnessed the cartel beating a group of Central Americans for trying to pass as

Mexicans to pay lower fees, Lucianna told us, “I tried to make myself hard. Like a man.” To endure border-crossing and all its brutality, she had to assume an emotional condition of being tough and unphased. She continued, “You have to take care of yourself as though you're a man. And no because, obviously, you're not going to have the same relationship with everybody... You don't know if they're good people or not. You don't know what to expect with these people.” When traveling with strangers, regardless of a shared social role, Luciana had to cloak certain aspects of herself and put distance between her and others. The tactic of distancing and hiding can be seen at structures such as BTC, a large, dark cave with rocks stacked up to wall off the entrances. Only a few explicitly (though not conclusively) gendered items such as a lipstick container and an empty tampon applicator were documented and these were always found on the perimeter of a shelter. A single sanitary napkin was found inside, placed in a pile of other discarded items. As in this case, sometimes there are gendered items *inside* border-crosser architecture but more often items like women's undergarments and make-up containers are on the margins of the architecture. This suggests that women seek privacy, or at least space to perform hygienic maintenance, *outside* of the shelters rather than inside. The transgression of gender is thus incomplete and must constantly be negotiated spatially and behaviorally, in part, through and around border-crosser architecture.

## **Conclusion**

Although the Sonora Desert may appear like a desolate and unoccupied stretch of badlands, it is in fact inhabited in temporary yet overlapping waves of people. There

are 'locals,' the ranchers, farmers, and residents. There are Border Patrol agents and their technologies. There are the border-crossers, divided roughly into migrants, drug mules, guides, and points. In the sub-group of migrants, there are further distinguishing factors such as economic and social capital (their financial resources as well as previous experience, knowledge, and social ranking). The notion that, "Creating things is a fabrication of the social self," (Tilley 2006, 63) posits the potential of architecture to tell us something unique about the social roles and relationships of border-crossers. Canter's theory of purposive role tells us that the objectives people have in certain contexts create that place for them; that one's social role as well as what they want to accomplish, defines place. With these notions in mind, this section showed how a structure embodies its builder's being, her social role, her experience, and her goals.

The form and siting of border-crosser infers the different purposive roles of border-crossers: a connection to people (so that they are not left behind), avoiding capture (through hiding), and survival (sometimes this is literally a matter of life or death, other times it is avoiding becoming ill or injured which often leads to separation from one's group). The structures are thus impacted by social roles and rules within and across border-crosser groups, as well as the roles and rules of political and technological control over the borderlands. As with all architecture, it takes money, power, and territory to have access to building and taking shelter. Social role and rules largely determine those variables. Sometimes, however, the roles and rules of the borderlands become indistinct or overlapping. While there are ways we can group border-crossers using demographic markers such as gender, nationality, education, and so forth, the social and purposive role of border-crossers often overlap and bleed into

one another. Additionally, there are various changes in patterns of border-crossing and reactionary changes in Border Patrol strategies. The siting and form of border-crosser architecture adapts to, and reflects, these mutations of border-crossing.

If border-crosser architecture is taken as an analog to the border-crossers that built it, then one can see the ways in which a single structure can shapeshift over time, both intentionally and circumstantially, in response to context. Just as migrants can project a different national identity, so too can structures present themselves as graceful evaders as with TH-01, or as bold counter-surveillers like GP-01, or as a communal gathering place such as BW-01. But just as border-crossers can elude a single social role, so, too, can each of the aforementioned structures be built by different people for different uses than those focused upon above. The qualities that lend border-crossers strength in the borderlands (elusiveness, adaptability, anonymity, and so forth), are the very qualities that make a conclusive or correlational analysis of their architecture nearly impossible. Nevertheless, a discussion of the various capacities and abilities of the structures grant us insight into the spatial and cultural factors of an architecture in the borderlands.

Being a stranger in a strange land can have its benefits - one can break free from traditions and social ties, becoming anonymous or assuming a different identity. Nevertheless, the hierarchy and structure of some relationships (gender dynamics, socio-economic status, and so forth) remain in place. These complex dynamics play out in border-crosser architecture. Whether or not architecture can be built is the first indication of power, status, and experience. The architecture itself and the artifacts around it can help identify a border-crosser's identity, social role, and experience, yet it

is still vital to remember that, “Diasporic souvenirs do not reconstruct the narrative of one’s roots but rather tell the story of exile” (Boym 1998, 523). The mutating forms and spatial organization of structure also point to the ways people interact with one another and mediate the external circumstances of the border-crossing process. One way in which people mediate their social role and the foreign landscape is to seek refuge through building. The next chapter explores the capacity and role of architecture to provide people with a home away from home.

## Chapter 5 Refuge: Taking Shelter

I'm lying face down on the ground at EA-X, about a mile north of the border, trying to figure out the next best course of action. My belly is pushed into the earth and I can feel movement beneath me. I cannot tell if the small stabs into my skin are from the thorns shed by mesquite branches or from insects angry that I have disrupted their daily routine. My legs are hanging halfway out of the structure and I am contemplating whether I should continue my trajectory, squirming with my arms pressed at my side and my knees out like a frog, or if I should wiggle out and start over - this time, maybe, legs first? In any other context, this would be entirely comical. But about three miles away from any road, far away from water sources, and a long walk to anywhere, being stuck or wearing myself out in this fashion would not be all that funny. Although maybe this is one of those moments border-crossers speak about when all you can do is erupt into laughter at the absurdity of the situation. I can only hear my labored breathing and I am getting self-conscious about it. It sounds as if it is filling the entire valley. I know this is not possible because other research team members are maybe only a dozen meters away and I cannot hear either a word or step from them. This quiet is strange: one moment it amplifies the slightest movement one moment, the next it swallows your sounds whole as soon as you turn the corner, disappearing you into the desert.

Employing phenomenology as a theoretical frame, this chapter focuses on the role of self-built architecture in a landscape of trauma, asking the question, "In a time of



uncertainty, temporary passage, and danger, what is a border-crosser's relationship to the architecture they build as a site of refuge?"

Somewhere in our collective memory reside those small, sacred, secret places we were able to call our own. Perhaps these are the forts we built by draping sheets over tables, a clearing in some shrubbery just beyond the neighborhood, or an abandoned gas station adjacent to the railroad tracks. Even though other people clearly had been there before us and after us (after all, there were empty cans of beer, scrawls of graffiti, footprints, discarded socks, forgotten mattresses), when we were there we were alone. And no one knew the place existed. No one knew we existed. As children these were the places our imagination ran wild. As young adults we tested the boundaries of society's constraints and regulations. Sometimes these were places of innocent exploration, and other times, they were built out of necessity, to escape what was happening around us. Our family's home, after all, can be a site of domestic turmoil instead of a nurturing haven. When there is a disconnect between one's personal daily life and that of one's surrounding context (be it city, neighborhood, or even house), one creates an alternative home, a second body, and an intimate refuge. So these alternative spaces spring up to give us a moment of respite from conflict. These spaces are often found on the margins, just beyond civilization, just beyond control, right on the border. While the context and degree of stress differ from one situation to another, the underlying experience of struggle and the underlying response of building remain the same.

There are migrants and *coyotes* and *burreros* who simply sleep under the sky. They throw their backpack or sweatshirt under their heads and curl up under a tree for a

nap or to eat and rehydrate. This in itself can be argued to be a kind of place-making - to temporarily call a place one's own, eat, clean, and sleep. However, to build a ceiling, thatch walls, or create an aperture through which to crawl, further defines the place. Architecture is a greater interruption, a longer-term investment into the landscape, a material, political, and personal intervention: "The house, even more than the landscape, is a 'psychic state'... it bespeaks intimacy" (Bachelard and Jolas 1994, 72). At its core, it creates an inside and an outside which creates various separations, most notably a social division between 'us' and 'them.'

Given the brutality of the borderlands, border-crosser architecture serves as a design intervention into an inhospitable environment and as such, it works to mediate various external forces. The way in which the structures interact with these forces, and which forces are engaged, changes the characterization and the material manifestation of the shelters as well as the experience of being inside of them. Thus the following chapter asks the question: How does border-crosser architecture elucidate the multidimensional qualities of refuge for border-crossers in a landscape of trauma, stress, and anxiety? To explore the capacity of structures to provide physical, social, and existential refuge these tensions, I present three ways (made distinct for purposes of structure, but in fact far from mutually exclusive) that architecture can respond to trauma: 1) as basic shelter to physically protect the body from the environment, 2) as a home away from home during a displacing journey, 3) as a "second skin," a psychoanalytical model of human response to trauma to protect the emotional body.

## Physical Shelter

Some of the most pressing concerns during border-crossing are the many physical dangers in the desert, ranging from climate and environment to violence and abandonment. Gabriel, a 23-year-old man from Honduras, gave us a summary of all the dangers of the borderlands in one streaming deluge of concerns:

The bajadores. There are so many dangers. The animals. The sun. The water. The food. You could go 2 days without eating... and if you don't pay the *pollero* [guide] then he runs off [and abandons you] or kills you... There's a lot of danger and you risk your life."

One of the most basic and fundamental acts of architecture is to provide shelter from the elements and thus this section focuses on the ways in which border-crosser architecture mediates the threats of environment, mainly climate and animals.

Fundamentally, this issue rests upon the relationship between man and nature highlighting the ways in which border-crosser architecture is undeniably co-constructed by human forces (social, political, material, and psychoaffective) and other-than-human forces (climate, animals, plants, topography, etc.). Additionally, while border-crosser architecture appears to be incredibly pragmatic, a mere simple shelter for outdoor survival, it is in fact far more contingent on competing aims and changing contexts, a complex manifestation of refuge.

In its form, materiality, and siting, border-crosser architecture strives to create an artificial environment to negotiate physical trauma. The positioning of entrance directions, thatching walls with grass, building up cave walls with rocks, building a ceiling spanning over a wash... these are all ways in which border-crosser architecture creates an imposed darkness in order to escape the unrelenting and dehydrating sun or

creates a pocket of warm, dry space during monsoon season. And yet these boundaries between inside and outside, human and nature, physical and emotional, are incredibly porous creating a kind of mutually dependent relationship. Yi Fu Tuan writes, “Wilderness may serve either as (a) a place of refuge and contemplation, or more commonly (b) any place where the Chosen are scattered for a season of discipline or purgation” (Tuan 1974, 110). In the case of the borderlands, we see how the relationship between nature and architecture is framed by both a kind of transcendental refuge and a place through which to suffer and survive.

The multiple manifestations of refuge are reflected in the language used by border-crossers to describe border-crosser architecture. Migrants like Arturo mentioned the unrelenting heat and the role of architecture in providing a refuge for repose, “The ‘cabanas’ are for resting in or sleeping... it was very hot. We slept at night and in the evening. Because in the day you can’t sleep. It’s too hot.” Mariana called the structure she was shown in a photograph, “a type of barrack [barranquitas] and it’s used for protecting yourself or to hide from the sun.” Arturo and Mariana’s language choice suggests refuge as a kind of peaceful escape and refuge as something that arises out of necessity and struggle. *Cabanas* bring to mind a kind of leisurely hut on a sun-soaked beach, a place to rest and even perhaps wile away leisurely time. *Barranquitas* have a military connotation, a refuge from warfare and fighting. Both are a kind of protection but one underscores the danger of climate while the other underscores the danger of human violence. Refuge is tasked with protecting against multiple traumas.



Figure 5.1 The main room of BW-01.

### *Climate*

BW-01 displays the ways in which border-crosser architecture negotiates external threats. In order to keep out the light, BW-01's walls rest upon a mesquite tree's load-bearing tree trunk. Walls are constructed from vertical, broken-off branches that are all 'Y'-shaped and placed carefully, alternating along the circumference: YλYλYλ, like crutches holding up the tree and protecting whomever is inside from wind, sun, and precipitation [Figure 5.1]. There are remnants of grass thatching on the walls that suggest the structure was at one point less permeable to light and surveillance, but wind and rain have since stripped the walls of their covering.

While the structure of BW-01's large room is impressive in its construction and degree of cover, it apparently failed to meet all the needs of prolonged habitation

suggested by the addition of a smaller room, extending off the large room. The smaller room's entrance faces the opposite direction of that of the larger room, spanning 90-180 degrees SE. Its entrance exposes the inhabitant to the direction of the road (though it is not visible to the road, only to the trail that connects the wash to the road), however it gives more thorough protection from the afternoon sun. In this design, we see the negotiation between hiding from surveillance and hiding from the sun and how the structure must respond to the position of the sun in the sky due to time of day and time of season.

In the smaller room's floor, there are two sun-bleached and decaying jackets - one heavier, one lighter. Either the same person or someone else reused the small room during different seasons. There are also two tuna cans, one with the expiration date of July 2010 and the other rusted beyond any identifying marks and thus much older. Among other interpretations of the S-shaped structure is that someone inhabited the already-existing larger room and, needing to stay longer into the evening, built the auxiliary smaller room to adapt to the changing sun conditions. Less enclosed than its larger counterpart, inside the smaller room there is only enough protected space for one adult lying down or sitting with legs folded (1.2 meters in height, 2.15 meters in length). From our interviews, it is more common for people to be alone in the desert if they are either a drug mule, a point, or migrant separated from their group. If the inhabitant was a drug mule, they were likely waiting for instructions on when and where to move when Border Patrol presence lessened. Some whom we interviewed spoke about being left behind in the desert. Suddenly, being lost and dehydrated, they no longer wanted to hide from Border Patrol and instead, desperately needed to be found by agents. If the

inhabitant of BW-01 were in a similar situation, they could have built the extra room with an entrance pointing toward the road so they could flag down a passing vehicle for assistance.

Neither room of BW-01 actually provides full relief from environmental threats. The measured differences in brightness in the large room during the day provide a paltry gift of shade. The external light reading in the early morning was 14.9 EV, the maximum interior light readings was 13 EV, which does not constitute a substantial difference between interior and exterior climate conditions.<sup>17</sup> The walls do what they can to deflect heat and create a slightly more tolerable space that may allow for a brief nap. These iterations, re-inhabitations, and two-room designs of border-crosser architecture speak to the constant need to negotiate competing environmental threats, never succeeding in creating a complete shelter which provides refuge in totality. This is best summed up in Joaquin's *prima facie* simple statement: "We just do it [build structures] to keep out the sun and the cold." The sun and the cold are often mutually exclusive entities and yet they are both conflated into a single environmental threat. It is not enough to think of blocking out the sun and thus the heat, but also to block the cold that may come after an unpredictable gush of monsoon rain or when night settles. Thus either the structures must continually compromise, putting one physical or social danger above the other, or adapt over time, doing and undoing its walls, its entrances, adding and subtracting materials to compensate for changing conditions.

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<sup>17</sup> Clumps of dry grasses lie at the base of the structure, and some still remain between the branches, suggesting that at some point the structure was more thatched and thus would provide more shade and cooler temperatures.





Figure 5.2 At left, a worn and destroyed cowboy boot found in the general area of BBW and at right, a migrant showing his blistered heel from his desert crossing.

The desert's severe sun exposure, wind, moisture, and desiccation inflicts trauma upon the body. When looking at a structure that is distressed, cracked, and torn by weather, we can invoke the inhabitant's body, equally vulnerable to sun, wind, and thorny flora. One can see duress not only through the impact of the climate on an object such as a worn out boot or a torn shirt, but also through the impact on the structures, and thus inductively, on the body [Figure 5.2]. The walls of the structures are rendered apart, branches ossified and brittle, and grass thatching torn from walls like hair from scalp. Simply put, if the desert can do such damage to a material and 'enduring object,' we can only imagine what it can do to the flesh and blood of a border-crosser.



## *Plants and Animals*

While border-crosser architecture does much to protect the body and sense of security, it is important to note that, far from being hermetically sealed and set apart from surroundings, the structure's protection is always incomplete. In writings about landscapes and humans as interdependent actors, the relationship is often portrayed as poetic, eternal, natural, and graceful. For example, Christopher Tilley writes of coherence and resonances that humans feel in the world: "The world itself begins to breathe. Thus the rhythmic pattern of human activities nests within the wider pattern of activity for all animal life, which in turn nests within the pattern of activity for all so-called living things, which nests within the life-process of the world. At each of these levels, coherence is founded upon resonance" (Tilley 1994, 164). His analysis of dwelling in landscape draws from a picturesque landscape painting which, as he himself concedes, has a "sense of rustic harmony" that "may, perhaps" be somewhat of an "idealization" (Tilley 1994, 165). Indeed, Tilly gives little to no attention to the dangers of nature, the horrors of hunting (a human act which Tilley directly references), of starvation, sweltering heat, or punishing cold. How can we speak of dwelling in nature without recognizing the very real moments of trauma and danger? Specifically, when the topic at hand is border-crossing and the landscape is the Sonoran Desert, the brutality of the wild and the humans who are part of it is unavoidable. Thus the cohabitation and co-creation of the borderlands by humans and animals manifest in various ways both affording refuge and continually threatening it.

The borderlands are continually altered and inhabited by non-human actors. Aside from ranchers, humanitarians, and border-crossers who walk and create paths in

the desert, cattle and wildlife also play a significant role in creating and maintaining the paths. Other times, water erodes pathways. When paths are created for other purposes or under different conditions than border-crossing, they can be misleading and disorienting. They often abruptly dead-end into a steep and impassable hillside or at a pasture or pond after meandering this way and that. This can lengthen a border-crosser's journey, making it more labyrinthine than a path that heads in a more or less straight line across the border and to a pick-up site.

In addition to paths, other landscape features are shaped and shared by humans, animals, and climate. For example, cattle tanks, large watering ponds for herds, are frequented by many other than cows, especially during particularly brutal hot and arid times in the summer. The muddy banks of these fetid bodies of water reveal hold the prints of dogs or coyotes, deer, rabbits, birds, and human boots as well as the feces from most of these animals. On the one hand, this sharing of space can help border-crossers avoid border-crosser detection. Nicolas, 37, from Honduras said that, "According to the guide, we had to lay down like cows, make one group, so we wouldn't leave any marks. We went in sandals/slippers not to leave marks." By mimicking and following animal tracks, human traces can become more ambiguous if not hidden altogether. On the other hand, animals pollute water sources that could otherwise aid border-crossers suffering from dehydration. The boundaries between animal-made and human-made space are porous which can provide affordances as well as add to physical and emotional trauma.



Figure 5.3 The form of BW-02 echoes that of a cocoon in its ovate shape and intricate weaving and thus metonymically stands in for a place of transformation where people change clothing and recuperate.

Although border-crosser architecture is built by humans, it shares many traits with an animal's nest or den. This is largely because, like other animals' shelters, the structures are made of available materials that are hardly processed or altered. As landscape is one of the prime generators of form and materiality in the borderlands, border-crosser structures have many similarities to those fashioned from the same materials or in common surrounds by insects and birds. The influence of landscape affordances is most evident in large stretches of desert that are flat and sandy where there are no building materials available and thus no structures are found. But as soon as there is a small group of mesquite bushes that interrupt the sandy expanse, a structure is often found. Emmanuel articulates the reliance on material, environmental affordances: "There are parts that's nothing but dirt. So when we get to these places

[ones with bushes and trees] we rest.” In using similar materials, structures often resemble nests.



Figure 5.4 A cocoon woven into the mesquite tree out of which BW-02 is built.

In writing of intimate spaces, Bachelard dedicates entire chapters to nests and shells, revealing how these images bring us back to our childhood, connote warmth and safety, and connect to our most primal selves: “...our consciousness of well-being should call for comparison with animals in their shelters...well-being takes us back to the primitiveness of the refuge. Physically, the creature endowed with a sense of refuge, huddles up to itself, takes to cover, hides away, lies snug, concealed” (Bachelard and Jolas 1994, 91). BW-02, in its nest-like appearance, calls to mind a Bachelardian physical refuge that connects to a primitive, existential part of our being that provides

comfort and well-being. Just above the entrance of BW-02, a large cocoon finds its resting place between a few leaves and twigs of a mesquite bush [Figure 5.4]. Its form, like that of BW-02, is somewhere between an oval and a cylinder, and the fibers of its walls, again like BW-02, reach out like tendrils, wrapping around whatever nearby branch onto which they can grasp [Figure 5.3].

The cocoon and the structure are not separate from the mesquite branch - the boundaries between them bleed. At one moment they seem to be independent bodies; were you to remove the cocoon from the branch or the structure from the shrub, they may hold firm their shape, solid and confident in their design. And yet, realistically, without their walls being woven into the mesquite's thicket, the cocoon and BW-02 would tumble with the first gust of wind or the first inhabitation. Beyond their co-dependence on nearby, contextual, nearby matter such as branches or boulders which begin to influence their form and the way they anchor themselves to the site, the two also share the similarity of scale and proportion. Both are scaled specific to their respective inhabitants, whether caterpillar or human, to snugly fit their prostrate bodies, waiting for a transformation, waiting to take flight.

While the shared characteristics of human and animal shelters may seem to portray a kismet and reciprocal environmental relationship, border-crosser architecture must negotiate a tense relationship with surrounding flora and fauna. The structures are both built from the environment as well as serve to protect against it. Since the structures do little to insulate from sound, a sense of refuge is frequently punctured by fear, triggered, for example, by sounds of nearby animals. Martina, 27, from Oaxaca said "There were just animals yelling. Like coyotes. I was scared." Ants, spiders, giant



centipedes, and snakes were all either mentioned in interviews or observed during fieldwork as seeking shelter inside the structures. Mariana, when asked if she used the structures she saw in the desert, matter-of-factly replied, “No because there are a lot of animals inside.” Sofia actually experienced this: “When we were in a *casita*, there were three of us laying down. And there, a little bit close to our head, there was a snake wrapped up. We heard its rattle... So we got up and realized there was a snake there.” The paradox of shelter in the desert is that even if one builds to protect the self, one can welcome other forms of danger inside. What repels one thing attracts another.



Figure 5.5 An empty beverage bottle found at BW-01 with mold, roots, and cobwebs inside.

The inversion of animal and human spaces extend into the discarded objects of border-crossers that become miniature works of architecture for wildlife. Fungus finds refuge in empty plastic soda bottles [Figure 5.5] and snakes curl up inside of heated black nylon backpacks. Spiders weave webs over and between artifacts, sometimes tunneling into the mouth of a container, creating an architectural hybrid of web, manmade object, and surrounding landscape [Figure 5.6]. Insects and birds inhabit the walls of border-crosser structures and embed their own built project inside.



Figure 5.6 In a wash uphill from BW-01, a spider's webbed building project surrounds a Redbull can, the entrance of the web connecting with the entrance of the container.

While border-crosser architecture mimics the shelters of nearby animals and emerges from the landscape, thus co-created by humans and the environment, this

relationship is not a neutral symbiosis where refuge is attained by a balance of external and internal forces. Instead, the structures provide a conditional refuge that are frequently perforated by emotion, politics, and material conditions. It is nevertheless some kind of refuge and in its unique manifestation, also embeds within it a notion of home.

### **The No Place Like Home**

In crossing the border, migrants have “separated themselves from the social structure of their home country. They removed themselves from family and friends...” (Chavez 1998, 83) thereby becoming marginalized and suspended in space. When leaving one home for another, the very nature of home and place is challenged. There is a lot of uncertainty when one crosses, especially for the first time. As Gabriel, 23, from Honduras emotionally conveyed:

You think a lot about your entire family, of your mother, your father, your brothers, your friends. And what they might be thinking, that something bad will happen. That they will not see you again, that you will face death... that there's no hope and you risk everything. You don't know what can happen. You don't know... if you'll see them again, if you live with them again. Well, it's... it's an option that one takes.

This uncertainty and fear is bound up in notions of home and family, of loss and displacement, and thus the desert is brought to the home and the home is brought to the desert.

The house can be understood as a symbol of the self, a private enclosure where one can individuate and integrate the parts unacceptable to society (Marcus 1995). If the borderlands accost and fragment a sense of self through various threats, then building a structure in the borderlands can be viewed as a way of piecing the self back together. If one loses a sense of one's own defensible boundaries, then making a



second body, a symbolic and material representation of self, can be crucial in coping with and moving through trauma. Domestication and the outside, wild world can be seen as opposite ends of a spectrum - home is ordered, bounded, controlled, and made comfortable by domestication, while wilderness is chaotic, expansive, unpredictable, and dangerous. But as the scholar Beatriz Colomina reminds us, “We leave the homeland to do battle on the outside. But there are also always lines in the interior, within the apparently safe confines of the house. As we all know but rarely publicize, the house is a scene of conflict.” (Colomina 1991-92, 3).

In the desert, a delineation between the interior safety of the home and the exterior danger of the world is a luxury not afforded to the border-crosser. The traditional construction of home as a rooted, stable, and safe place is untenable; staying in one location for any length of time is tantamount to surrendering to surveillance. So home must transform, becoming nomadic and, often, existing as something immaterial, either in memory or symbol. Border-crosser architecture pushes against the 18th- and 19th- century notion of “home and homeland” being “paired in the spatial imagination in such a way that one was conceivable without the other” (Gillis 1996, 113). In the borderlands, can home emerge even when one is separated from homeland?

For most border-crossers, the huts appear to be a perfunctory and temporary experience based on survival. For example, a young *burrero* in Altar boasted that he could erect a shelter in 15 minutes or less and that he destroyed them immediately after use so that Border Patrol would find no trace of him. Nevertheless, there are signs that point to, if not a conscious effort to home-make, then at least a subconscious or habitual drive to take the sublime horror of the desert and to make sense of it with a set of walls,

a roof, and a place where to rest the body and its accoutrements. Refuge is transported, created, undermined, and redefined; sometimes out of desire, sometimes out of necessity, sometimes with intent, sometimes seemingly haphazardly.



Figure 5.7 At left, a photograph of EA-B; artifacts are mostly not visible. At right, a diagram of EA-B's 'floor plan,' showing the hidden artifacts and a designated area for refuse with a higher concentration of artifacts.

Within border-crosser architecture, one can make home through order.<sup>18</sup> At EA-B, artifacts are carefully placed around the inner perimeter of the shelter [Figure 5.7]. A few empty cans and bottles are placed between or butted up against rocks - these items are on the south-eastern to western sides while on the north-western wall, a few clothing items including a long-sleeve shirt and a denim and carpet bootie are placed against the boulder. Slightly outside of this inner perimeter is a designated garbage area containing, among other things, a bread bag, a coffee jar with instant coffee grounds remaining inside, white gallon water bottles, some emptied cans of sausages and

<sup>18</sup> While the literature on architecture, domestication, and order is vast and varied, one may refer to Lévi-Strauss's and Bourdieu's structuralism as a way in which architectural refuge, that is, the home, becomes a locus for ordering relationships such as male/female, sacred/profane, light/dark, etc. which are equally culturally and individually practiced and experienced (Lévi-Strauss 1963, Bourdieu 1990). The use of structuralism in cultural anthropology has of course moved beyond this kind of binary analysis, yet are relevant progenitors to the analysis of culture and architecture. Over the past three decades, Amos Rapoport has bridged together anthropology with environmental design research, revealing how both fields focus upon affective and symbolic aspects of the environment, as well as the interaction between artifacts, people's behavior, and space (Rapoport 1987, 2006).

beans, and one caffeine pill wrapper. While migrants also have reported using pills and beverages for stimulation, they often did so under direction of their guide, and said they traveled in groups of at least four or five. Therefore the booties and caffeine in EA-B, along with the smaller size of the shelter (less than a meter in height, just over a meter in width, suggest a possible solo drug mule, though do not exclude migrant use. Out of six empty tuna cans found in the structure, three were too rusted to see an expiration date and the others were dated 2008, 2009, and 2017. Similarly, three Electrolit bottles had a range of ages, with expiration dates of 2007, 2006, and one too degraded and faded to see an expiration date. These multiple expiration dates of similar products, coupled with their varying conditions, suggest repeated inhabitations of the same site over some years. The deposited clothing items (such as an insulated jacket and a long-sleeved shirt) may suggest changes in temperature during the stay in the shelter such as a colder night followed by a hot morning where the extra clothing layers would be shed. Since the structure could have been used by different people over a stretch of time, it is not clear when these items were organized into a food area, a garment area, and a trash area. Nevertheless, at some point, someone either did some 'house cleaning' by moving all detritus being corralled into a trash area, or people continually ordered the space following the method that came before them. As temporary as the inhabitations of the structures can be, border-crossers exercise a degree of care and intention by dividing the space according to its specific use, like rooms in a house.

Beyond the physical ordering of space, border-crossers often carry a sense of home through memory and souvenirs. David Parkin has termed the process by which traumatically displaced people reconstitute their self-hood through mementos as

“reversible objectification” (Parkin 1999, 315). While people on the move can lose their connections to home, community, and self, they can figuratively store memory, emotion, and identity in the things they carry. Objects from home can have particular significance as they can “create permanence in the intimate life of a person, and therefore are most involved in making up his or her identity. The objects of the household represent, at least potentially, the endogenous being of the owner” (Csikszentmihalyi and Halton 1981, 17). When border-crossers carry objects from home with them, they can thus partially reconstitute the sense of self and thereby experience some sense of permanence and continuity during an otherwise ephemeral and fragmented experience.

Bruno is a *burrero* who lives in the United States with his family but who makes border-crossings from Mexico once a year carrying fifty kilos of marijuana on his back. When asked what he brought from home, he mentioned a tattoo of his wife’s name, and the voices of his children in his memory. He said he brought nothing material from home. But when asked about the lanyard around his neck and the handful of keys that hung from it [Figure 5.8], he tenderly flipped through them and listed what lock each key opened: one the garage in which his daughter’s bike sat, another the apartment key to his home in the States, another a storage unit where he kept some of his belongings from Mexico... Each key became a kind of synecdoche to his life across the border; microcosms of home space held in each object.



Figure 5.8 Bruno, a border-crosser, holds the keys to various houses, garages, and storage lockers, some of which are in California and others in Mexico.

The walls of border-crosser architecture can create intimacy by circumscribing strangers inward together, curtailing the vastness of the unknown and transcending the terror and trauma of the exterior world. Svetlana Boym has written about diasporic homes, revealing that wanderers are “at once estranged from and engaged with the life around them... it is precisely the common experience of dislocation that makes intimacy possible” (Boym 1998, 502) and that there lies a power in “inhabiting the most uninhabitable space” (Boym 1998, 510). Though border-crossers did not refer to the structures with any consistent particular terminology, some did use the word ‘casitas,’ or little houses, to refer to the photographs of border-crosser architecture they were

shown. This dimunitized noun suggests a kind of intimacy and familiarity with the structures, as opposed to simply calling them by another name such as 'hut' or 'structure.' Some structures, are built to have multiple 'rooms' where a group of border-crossers can break up into smaller, more intimate, possibly filial units where there is privacy and segregation from one another.

Sofia, a 30-year old woman who sat and spoke with us at a migrant shelter in Nogales (after sobbing on the telephone with her brother because she was deported, exhausted, and did not know what to do), recalled being inside a structure on the Mexican side of the border before trying to cross: "When we there for nine days and we were all a bit desperate, some of the boys put rocks in the bottles and they started to shake them like maracas [Laughs] and we sat around and sang while someone played the drums on another bottle. We started to sign and sometimes we would tell jokes and stories...With the waiting that we had to do, we didn't know what to do so we became artists." Thus, in the space between constant movement and helpless waiting, architecture creates a boundary in which one can become familiar with strangers and to soothe one another through a kind of survivor's humor.<sup>19</sup>

The moments people spend together resting in the desert can provide a moment of respite from physical and mental exhaustion. Rodrigo, 26, said, "We were telling jokes so you don't get fed up. I'm very relaxed. I like to talk. I don't like to be silent. I like to play around, throw dirt around. But sometimes when you're tired you forget about that stuff. [Inside the structure] you [can] throw rocks around when you sit down like you're a

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<sup>19</sup> Humor is a common coping mechanism used among border-crossers to add levity to difficult times (Winkelman, Chaney, and Bethel 2013, 1822, De León 2015, 92-94). For a comprehensive literature review and discussion on how humor is generally employed by survivors as a therapeutic response to trauma, see (Garrick 2006).

little kid... [you] sleep, rest, think. more than anything, thinking about the future of the family... For resting, to get refuge from the cold. When you're resting, you feel the serenity from above." Border-crosser architecture thus seems to allow for a bending of restrictions while border-crossing, to loosen up, to experience other emotions other than fear. One can play as a kid at home. The structures also provide refuge in the form of restoration and healing. Nicolas, 37, "[Inside the structure] we talked a little. We talked about words of sustenance. Not to worry. That somebody was there to help the other one. There was a guy who was burnt and we were trying to encourage him because he was too tired to walk." Inside the walls of the huts, people can care for one another and care for themselves often while thinking of family, childhood, and home. Nevertheless, the structures are still sited within a highly contentious environment and thus can be seen as a forced response to trauma, one that can harm as much as it can protect.

### **Second Skin**

While homes often encapsulate both conflict and comfort, migrant homes in particular are a place of refuge as much as they are a place of anxiety. As Sarah Willen writes of the undocumented migrant homes in Israel, "While homes are still important sites for the cultivation of sensory familiarity and "homeliness," they effectively lost their role as safe havens from the outside world... Since then, the formerly safe space of "home" has become infused with a frightening sense of penetrability, porousness, and danger" (Willen 2007, 41). Even being less visible and stationary, border-crosser architecture is subject to the same degree of fear of discovery, capture, and deportation. Migrants like Diego, 33, and Emiliano, 18, told us their greatest fear before border-crossing was getting caught by 'la migra.' Others told us of all the precautions they took

with their group to avoid leaving any trace behind, a structure or otherwise.

Nevertheless, as much as home place is problematic, architecture creates an added degree of protection.

Phenomenologists stress the existential and sensational power of home in uniting body with self and surrounds, often positively valuing this connection. Juhani Pallasmaa writes, "There is a strong identity between naked skin and the sensation of home. The experience of home is essentially an experience of intimate warmth... Home and the pleasure of the skin turn into a singular sensation" (Pallasmaa 1996, 59-9). And yet in the desert, it is not pleasure that is the primary generator of home - both transcendence and trauma are inflicted into and onto the skin of the border-crosser body and the skin of border-crosser architecture.

For the first time in 1968 and then again in 1986, a psychoanalyst by the name of Esther Bick proposed and expanded her theory of second skin. Her theory was that infants, children, and neurotic adults who had not successfully developed a unified sense of self would create something to help contain their perceived fragmented parts. She writes, "...in the earliest times the parts of the personality are felt to have no inherent binding force and fall apart unless passively held together, an experience indistinguishable from feeling the body to be held together by the skin... [I]n the event of defective development of this containment function other 'secondary skin' devices may arise... (Bick 1986, 292). In her patients, the secondary skin formations could take form in the body through changes in musculature or vocal tones or they manifested through ritual behaviors or attachment to objects. Since the 1960s, her second skin theory has been used widely by psychoanalysts interested in childhood development, autism, and



trauma (2002), extended to adults with personality disorders (Schmidt 2012), and proposed as a useful framework through which cultural theory can theorize the skin and self and its many modifications and ailments in Western culture (Lafrance 2009). In its more contemporary iterations, the theory is the foundation upon 'psychic skin' theory is built, speaking of how the self is contained and formed by metaphorical skins rather than the actual skin itself. I return to her original theory because it also discusses literal, material manifestations of a second skin which in the context of border-crossing, can be built space.

While others have used the the body and specifically the skin as a way to describe architecture, its building technique, and its multisensory capacity (Vitruvius, Morgan, and Warren 1914b, Van der Rohe 1947, Pallasmaa 1996), Bick's theory when applied to the built environment can complicate the notion of constructed skin as something that can harm as much as protect. She writes, for example, of a young girl who holds her breath and tenses her muscles when confronting stressful circumstances. While it contains her self and forms a kind of exoskeleton, it also prevents her from forming social and spatial connections with her surrounds, thus curbing her development. This double-edged nature of refuge and containment is particularly useful to highlight the ways in which refuge in the borderlands can offer solace but all the while is still formed by the conditions of trauma and thus is far from a utopic reverie or a neutral and pragmatic response to environment.

This chapter section posits that border-crosser architecture is a kind of secondary skin formation that arises in response to a landscape of trauma. Bick writes: "The catastrophic anxiety of falling-into-space, the dead-end, haunts every demand for

change and engenders a deep conservatism and demand for sameness, stability and support from the outside world. This may be masked where a second-skin formation is a prominent feature of character..." (Bick 1986, 299). In the borderlands, where one is uprooted, dislocated, and in a state of crisis, there is little stability. When I asked Santino, 36, when he knew he had crossed the border, he said "I didn't know anything. I just walked." Felipe, 22, also expressed an inability of locating the self in space, "Well. I mean. They seem like trails but there are times where we'd go and it doesn't seem like a trail. It's just pretty much just the guide who knows where we're going. And to me, it was my first time, so everything seemed the same to me. I felt like I was going in circles." The borderlands are a kind of ever-repeating purgatory, a context in which the self leaks into the world without containment.



Figure 5.9 A student from UMP's 2013 field school lies inside of CWII-02, the structure enveloping his torso and protecting his head. Loose branches lie in and around the wash suggesting that at an earlier time, the structure fully concealed the reclining body.

The way in which border-crosser architecture surrounds the body so closely, in such a tactile fashion, one can begin to think of architecture as a second skin. An example of a close relationship between body and structure can be seen in the exoskeleton of CWII-02. Sited inside a narrow wash, its supporting structure is comprised of a large branch horizontally resting on one end on the edge of the wash, and on the other end, between the crevice of a vertically placed Y-shaped branch [Figure 5.2]. Many other dead branches pile atop the supporting beams to create a triangular, tent-like form into which the head of a person can hide at the narrowest point, and the widest point can accommodate bent legs. Emmanuel, a drug mule, described to

us similar punto structures: “[The puntos] kind of rig 'em [the structures] themselves, so they grow around their being and everything.” The architecture becomes another organic living layer that existentially grows around the inhabitants – around their very being. Like the secondary skin formations of Bick’s patients, the materiality of the second skin is far from delicate. It is hardened, stalwart, almost as if a scab on the desert’s ground. And yet it so adeptly creates a place to ground the body, to hide it away from surveillance, to protect it from sun and wind, and to secure it.

That which affects the body transfers to the materiality, form, and quality of border-crosser architecture. The trauma of the landscape becomes embedded within the protective layer. Bachelard conflates the house and the body in times of duress writing, “the house... becomes the cell of a body with its walls close together... faced with the bestial hostility of the storm and the hurricane, the house’s virtues of protection and resistance are transposed into human virtues. The house acquires the physical and moral energy of a human body” (Bachelard and Jolas 1994, 46). But while in his case, the house is virtuously protective and resists bestial hostility, in the case of border-crosser architecture, that hostility not only creates the need for the house but also becomes part of it. The structures are made of bristly branches that claustrophobically envelop the body. To enter larger structures, one must perform a swift series of choreographed contortions comprised of leg lifts and head bobs, torso swerves and arm extensions. To enter smaller structures, one must slink inside by pushing the ground with one’s forearms, dragging the torso and legs behind. Once inside a structure, the bodily maneuvers are not yet complete: squatting, turning, folding-unfolding-refolding appendages, are all necessary just to situate the self awkwardly in the cramped

confines of unwieldy, thorny walls. While the structure may offer refuge from surveillance or sun, it also assaults the body, scraping it with mesquite thorns, heating it in cramped quarters, or betrays secrecy by becoming proof of an illicit and clandestine passage.

Refuge may bring to mind comfort, but comfort is not really the aim or even a possible outcome in the borderlands. While a second skin or house can innocuously protect the wearer, secondary skin formation is a defense mechanism which ultimately takes its toll on the traumatized person. Border-crosser similarly provides refuge but at a cost. Its secondary skin formation is an unnatural adaptation to having one's selfhood and cohesion threatened, forced into being by a traumatic landscape.

### **Conclusion**

In the discussion of border-crosser architecture and refuge, the characteristics of the structures complicate common conceptions of place-attachment and dwelling. While place attachment usually is defined by repeated, long-term positive engagements with a certain geographical area (Morgan 2010), border-crosser architecture arises out a traumatic, ephemeral context. The landscape of the Sonoran Desert can be pleasing at times. As Adrian, 35, from Jalisco said: "The desert is beautiful. It's really pretty. The mountains... [they are] not beautiful memories. But there are memories that sort of stay with you." Evident in his response is the double-edged nature of the desert, that while there might be beauty, nature is also one of the greatest adversaries of the border-crosser, often causing more physical harm than emotional repair. Common to people who experience trauma, there are memories that persist and haunt.

The social context of border-crossing complicates the notion of dwelling. Intimate spaces of dwelling are often portrayed as spaces of solitude where the self can experience ultimate solace. Yet border-crosser architecture must contend with the threat of violence from border-crossers, Border-Patrol, and strangers. At the same time, the structures can become a locus through which strangers become close friends. Additionally there are traces of home in many of the structures and they can function as a way station, a kind of temporary hospital, for people to help each other tend to emotional and physical wounds, to recuperate from the heinous trek across the landscape. Thus border-crosser architecture reveals the tension of refuge in a traumatic environment: one between stasis, safety, and the familiar on the one hand, and movement, exploration, and the strange on the other.

Beyond the ephemeral and social aspects of border-crosser structures, trauma colors and shapes building into a different manifestation of refuge. It is not a refuge of peaceful dwelling, a neutral or positive space of complete stability. Instead, refuge in the desert at once contains the intimacy of nostalgia and the brutality of external violence, containing the binaries of “retreat and expansion, simplicity and magnificence” and a “repose and flight of being” (Bachelard and Jolas 1994, 65). There is no elegant synthesis or balance attained. The way in which a structure must arise to become a second skin is a defense mechanism which harms as much as it protects. Within its walls, it contains the very trauma against which it protects. Thus refuge seems to have a different dimensionality when it is sought and chosen as opposed to created out of duress and crisis. While there is a certain power that arises out of delineating a home place, at the same time, architecture becomes a forced intervention into difficult

environs, a landscape of displacement. Arendt wrote, “A refugee used to be a person driven to seek refuge because of some act committed or some political opinion held.

Well, it is true we have *had to seek refuge*; but we committed no acts and *most of us never dreamt of having any radical opinion*” (Arendt 1994, 110 (emphasis added)).

While this chapter framed border-crosser architecture as refuge, questions of resistance or radicality are also pressing within the contested terrain of the borderlands. This is covered in the following chapter.

## Chapter 6 Resistance: Strategy in a Militarized Landscape

On a hot day in July of 2013, a group of us from the Undocumented Migration Project field school (Dr. De León, undergraduate students, and graduate teaching assistants) were returning to our vehicles after a hike to the border. Before reaching the dirt road, we encountered two disoriented men; one looked to be in his mid 20s, the other in his early 30s. They had large gallon jugs of water and one had a backpack with him. They asked us which direction the border was in. They said they were walking around for hours lost. One of us pointed “that way” and a few of us uttered approximations of distance. “Maybe one mile.” “Maybe three miles?” “Half an hour’s walk.” “Maybe an hour?” We had GPS units and watches with us during the hike and still, our bodies and minds couldn’t quite piece together a memory, a plot of space through time, a concrete measurement.

Then, from a moment of mild confusion erupted great chaos. The two men dropped their water and their backpack and started running up the path we had come down, back toward the border. I turned to see two machine guns aimed at us. Behind the guns were two uniforms replete with bulletproof vests and additional weaponry. Inside the gear, two white male bodies, perhaps in their late 20s or early 30s. Through the fear and shock, I finally recognized them as Border Patrol agents. They were slow to point their guns away from us and to the ground. They asked if we had seen anyone. We stammered, “No.” They seemed incredulous and, smirking, took off at a trot up the



path where the migrants ran saying, “You know, even if we don’t get them, the helicopter will.” One moment it was just our little group in what seemed to be a desolate landscape. The next, we were in the middle of a pursuit and in the line of fire. The borderlands are violent and dangerous, eerie and terrifying, even for me, a white female researcher who, according to the state, is considered ‘a citizen’ and thus ‘belonging.’

In this chapter, I examine the ways in which border-crosser architecture, both as social practice and as material form, resists the constructed power of the borderlands landscape. Investigating these issues through critical theory, this chapter asks: “In what ways can architecture built in opposition to power have the agency to resist the context in which it was created?”

Architecture and urban design have a close relationship with these landscapes of power. Theorists, critical geographers, and urbanists have highlighted ways in which the built environment serves those in power. Most notably, Foucault’s writing on the Panopticon stresses the way in which architecture can ruthlessly confine and surveil occupants within a prison, constructing the illusion that one is always watched no matter where one is (Foucault 1977). More recently, a great deal of writing on Los Angeles has also captured the double-edged nature of architecture in its relationship to hegemony (Soja 1989). Mike Davis, for example, has identified an American “obsession with physical security systems, and, collaterally, with the architectural policing of social boundaries” that creates militarized, privatized landscapes founded on the perception of the dangerous other (Davis 2006a, 223).

This scholarship focuses on the institutional and public setting, most often in urban environs, and thus frame architecture more or less as “a ‘political plastic’ - social

forces slowing into form" (Weizman 2012, 7). Thus, in landscapes of power, architecture is power solidified into material form, exerting dominance over the disenfranchised. In the context of immigration over the US-Mexico border, this is visibly also the case. Walls are literally built to enforce legislation, determining who belongs and who does not. On the Mexican side of the border, *casa de huéspedes* are a kind of 'hotel' where migrants pay exorbitant costs to sleep on urine-soaked cement floors of houses with no electricity, water, windows, or even doors. The building shells are a ruse of shelter. On the American side of the border, private detention centers make profits off of detained border-crossers (Doty and Wheatley 2013), the building of walls and other border security structures are promoted as job-prospects to drive the economy (Bahler 2017). On both sides of the border, architecture abets power and economic exploitation.

In these aforementioned ways, architecture can have a complicit role in capitalism, surveillance, and armed aggression. Resisting the architecture of power usually comes about by counter-action or social practice rather than counter-architecture. These tactics can be thought of as "everyday forms of resistance" as defined by James Scott. His study of Malaysian peasants highlights the ways in which people under oppressive conditions resist those in power through forms of "subtle sabotage, evasion, and deception" (Scott 1985, 31). According to Scott, these acts can be temporal in nature, such as "foot dragging" and slowing the rate of work and productivity. Or they can be spatial, such as squatters encroaching on plantation lands.

When undocumented migrants and drug smugglers make the clandestine journey from Mexico to the United States, they are viewed as being "temporarily suspended in an interstitial space" (O'Leary 2009, 93) and are simultaneously

employing counter-strategies to the anti-immigration tactics set forth to displace them. Border-crossers work to resist the limits and threats placed upon them. David Spener, for example, has written about “rasquichismo,” an “analytical framework that treats unauthorized migration by Mexicans as a form of resistance to the U.S. government’s attempts to police their movements’ (Spener 2010, 9). This adaptation is one way in which otherwise disempowered people can push back upon the power of legislation and institutions. Building structures can be another one.

In terms of built environment, everyday resistance is often discussed in the realm of slums, refugee camps, disaster zones, and homeless encampments. As Stephen Cairns outlines, there is an “architecture-by-migrants,” ex-pat gated communities or “ethnic enclaves” like Chinatown, that is more or less accepted into the field of architecture for its cultural and aesthetic value. Migrants here are considered to have agency in forming their built environment. Then, there is “architecture-for-migrants,” that tends to fall into one of the following categories: 1) shantytowns and shopping cart mobile homes, 2) purely pragmatic generic structures plopped down by institutions, 3) overly aestheticized and designed projects from architectural competitions, or 4) detention centers. Although these typologies of “architecture-for-migrants” are often vastly different, Cairns says they all have this in common: the “architect’s agency – asserted on the basis of a diminished migrant agency – remains in place” (Cairns 2004, 28). Even when a migrant or refugee builds her own shelter, this is thought to be purely out of need and survival, completely constrained by poverty and displacement (Cairns 2004, 23). In Leo Chavez’s ethnography of seasonal farmworkers, he focuses on the ways in which people form community or must contend with the difficult living conditions

in their self-made camps (Chavez 1998, 67-76). While the structures also must remain hidden from Border Patrol since they are 'illegally' inhabiting the land, his discussion of the farmworker shantytowns focuses on pragmatic and social dimensions of the shelters, and does not engage with them as a possible mode of resistance or subversion. Yet this mode of inhabiting and creating architecture can be precisely that.

In her work on undocumented migrants in the United States, Barbara Coutin states that "...illegality erases presence and suspends time" (Coutin 2005, 196). This echoes the dominant force of border-crossing, largely: visibility and detection. Resistance to detection can be spatial (by marking presence or taking advantage of invisibility) and temporal (reordering and leveraging time). While surveillance works to expose clandestine border-crossers, border-crossers can reorganize time in order to further cloak themselves and to enable counter-surveillance. Similarly, staying on the move and becoming invisible evades the watchful gaze of Border Patrol. While policies and strategies have turned the borderlands into a purgatory where border-crossers disappear, border-crosser architecture can mark the presence of death and of the border-crossers illegality seeks to erase. While these forms of resistance may seem contradictory (sometimes seeking to become invisible by erasing traces of the self, other times reinscribing the self even when absent), they both work to undermine the conditions.

Border-crosser architecture can be highly strategic and intentionally stealthy. This chapter examines the ways in which border-crosser architecture resists a militarized landscape in which border-crossers are considered illegal in three ways. First, I examine the ways in which structures are able to resist control of the gaze by

creating its own time cycle. For example, they enable counter-surveillance being sited on top of a ridge to observe Border Patrol routes and block the sun so that one can sleep during the day and watch Border Patrol during the night. Second, I look at how border-crosser architecture resists detection. For example, by being destroyed after inhabitation and being built for ephemerality. Finally, I elucidate how architecture resists the the oblivion of death by marking the landscape with remains. For example, the structures' skeletal and resilient form makes corporeal and visible the structural violence and injustice of the border. Border-crosser architecture provides an expansion of the relationship between power, architecture, and resistance: marginalized people not only have the power to organize within space (between architecture), but also *over* space *through* architecture. Thus, I hope to explore how a material counter-architecture can arise as an everyday form of resistance.

### **Counter-Surveillance and the Reorganization of Time**

An architecture that disables rest becomes a far different structure than one that enables rest. In the desert, rest and sleep are strictly regulated activities. Whether they are controlled by people in power (cartels, humanitarians, border patrol) or by the obstacles of the natural environment (the sun, the monsoons, the nearly untraversable steep terrain). The building or inhabitation of structures is equally regulated. In the borderlands, both rest and architecture become contentious and political. The ever-watchful gaze of surveillance lights up the dark, exposing what wishes to remain hidden: "Full lighting and the eye of the supervisor capture better than darkness, which ultimately protected. Visibility is a trap" (Foucault 1977, 200). Given relentless surveillance, border-crossers are less likely to be detected traveling at night than the

day. However, summer temperatures reach upwards of 120 degrees Fahrenheit making daytime sleep uncomfortable and even untenable.

For many of us, in our modern world, sleep is a given; a mundane fact of life. But in the desert, sleep falls somewhere between desperate bodily need and terrifying vulnerability. To be asleep is to be helplessly unaware of the world around you. Natalia, a woman trying to cross the border, made this clear: “We didn't see immigration [Border Patrol]. And when they caught us, we were sleeping.” Sleep is a time when one’s guard is down, when one’s eyes are closed - the watcher becomes the watched.<sup>20</sup> Thus, border-crosser architecture’s siting responds with multiple tactics. It is built to be big enough to house a small group of people who can warn one another (safety in numbers). Or it is organized in small but separate clusters so people can quickly egress and disperse from multiple locations. Or the architecture becomes a full-body shield to ensure protection from elements, animals, and surveillance at all times.

Shelters where people cannot recline to sleep are built for the function of vigilance and counter-surveillance, used for watching others as much as for evading detection. In this context, architecture becomes a technological apparatus, much in the way that Jonathan Crary describes the capitalist global laborer or the modern soldier. Just as with “sleep mode” on a computer, restless architecture and its inhabitants are, “an apparatus in a state of low-power readiness... It supersedes an off/on logic, so that nothing is ever fundamentally ‘off’ and there is never an actual state of rest” (Crary, 13). Some shelters also are constantly in a stated of low-power readiness in the ways they

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<sup>20</sup> Once settled in the the United States, being susceptible to raids and deportation permeates the everyday lives of undocumented Mexican migrants and their families. This perpetual anxiety leads to mental health issues as well as various strategies to remain invisible (Chavez 1998, Zayas et al. 2015, Perreira and Ornelas 2013, DeGenova 2002). For a clear and powerful account specifically highlighting the interruption of sleep due to illegality, see Sarah Willen’s ethnography of undocumented migrants in Israel (Willen 2007).

are oriented toward the sun. The walls and roofs can extend in all directions providing 360-degree coverage where people can stay longer, not only because they have protection from the sun at any time of day during any season, but also because it shields them from detection. This kind of structure takes longer to build and requires more structural ingenuity (it is far easier to build a quick lean-to singular wall than to orchestrate a self-standing enclosure). Thus a less temporary, more advanced and complicated architecture affords more sleep. Border-crosser architecture thus responds to “a generalized inscription of human life into duration without breaks, defined by a principle of continuous functioning,” and “...terminal disruption of the cycles and seasons on which ecological integrity depends” (Crary, 10). It is a round-the-clock apparatus.

BW-01 was the first documented structure during the summer of 2012. Located just off a small wash, its overall form is S-shaped with one curve larger than the other. The bigger room has a diameter of 2.5 meters and a height of 1.5 meters. There is plenty of space to stand erect and lie down with legs fully extended. Up to eight adults could sit together and six could recline if circumstances required denser living conditions. The form and proportions of this particular structure could be related to climate (the extreme cold encourages people to huddle together) or could be related to time constraints (a group could collaborate on a structure and share it while still taking up a small, less visible, footprint).

The entrance to the large room faces 320 degrees NW lending most protection from the morning sun rising in the East. If the structure were built at night in anticipation of the rising sun, the thin polyester jackets could be used to preserve warmth during any

average summer night. They then could have been discarded later in the day when the temperature rose. A cell phone pouch rests on the floor along with the jackets which could mean that this was the last place where people waited for a telephone call to signal a ride waiting at the road. Or it could mean that someone discarded the cell phone pouch having never used it, that it just was an included backpack accessory (seen commonly during fieldwork at shops geared toward migrants). Border Patrol vehicles also patrol this road, and thus the walls also work to buffer the inhabitant from government surveillance. Though while inside the structure, one can still hear the dull roar of an SUV's engine and the thick puncture-resistant tires rolling over the narrow, single-lane, pot-hole-filled, rocky road. The large room of BW-01 thus provides dual concealment, one environmental and one socio-political, while mediating visual, tactile, and aural fields.

In the desert, this resting space is often adulterated, used instead as a space to fill the body with substances like energy drinks, caffeine pills, or marijuana in order to counter the natural need and desire for sleep. Occasionally there is a blanket or a trash bag left behind as evidence of a moment of rest, but not at BW-01. At BW-01, there is an empty Redbull can and an empty pill package, either from caffeine pills or pain suppressants. This suggests that while architecture lends a moment of "down time" to the traveler, this moment is temporary and often used to push the body beyond its limits by denying it rest, sleep, and proper hydration. When the body's natural sources of adrenaline (generated from fear or excitement or both) wear off, these packaged substances artificially replace the body's chemicals.



In these cases, instead of enabling sleep, architecture enables altered states, intoxication, and concealed consumption of drugs. This place of resistance foregoes the far-too-luxurious privilege of sleep, rest, and hydration. Energy drinks propagate aching, otherwise surrendering muscles up and over steep hills. Caffeine heightens the senses, making one alert to the slightest sound. A mere rustle in the bushes could mean Border Patrol, could mean competing Cartel operatives, or could mean a rattlesnake. Felipe, a 22-year old male raised in Arizona and deported after an arrest told us, “[You don’t sleep] as good as you would when you’re at home but I mean you try. You’re kinda... aware during the time you’re sleeping you’re constantly... any little noise... you wake up, you don’t know... it could be an animal or it could be a border agent approaching so... you sleep real... with a lot of conscience [sic]... like... You’re not fully asleep.” Border-crosser architecture is a double-edged paradox: it provides shelter and creates shade in order to enable sleep while also disabling rest and enabling stimulation. It overcomes the border-crosser’s physical needs while putting her in greater danger by muting the body’s signals for the need for rest or daily cycles.

Especially in the context of a constantly threatening natural landscape, border-crosser architecture highlights the violence of sleep deprivation. One woman reported being allowed to build a shelter but not being allowed to speak at all - the entire night was cloaked in silence. At least she was able to sleep soundly. Women more commonly reported issues with sleep, playfully but honestly recounting, “The men slept fine! [They] were even snoring! We [the women] were awake hearing snakes and [wild animal] coyotes...” Women were also often quick to characterize their guides as being surprisingly tireless, hinting that they may have been on some sort of drugs. If women

wanted to stop and rest, their requests were often quickly met with either condescension or brusquely rejected. As Camila, a young woman cheekily relayed, “I wasn’t able to sleep... they didn’t give us enough time. We were always walking the whole night and the time that they let us rest at night was about five minutes but it was really cold...” However, when the guide was ready to rest, “Half an hour for him! Half an hour when he wants to [rest]. But I still couldn’t sleep.” The guide’s rules often keep the group in perpetual motion, disrupting any social bonding or adequate rest for his group<sup>21</sup>. Sleep becomes a commodity regulated by those in power who also control if shelters are built.

In his study of the temporality of European border-crossing, Ruben Andersson portrays a “border’s temporal topography” as “jagged and irregular, split into overlapping areas of control, surveillance, and (im)mobility that often clash with each other” (Andersson 2014, 806). These conflicting time scales are sometimes the militarized speed of real-time surveillance or the slowed time of migrant tactics waiting to cross. Border-crosser architecture in the US-Mexico borderlands also must negotiate these variations of time, especially in its response to solar time (structures built to be nocturnal or diurnal or for the summer or winter) and sociopolitical time (corresponding to Border Patrol schedules or the rhythm of moving drugs and moving people). Time slips and shifts for border-crossers, many whom we interviewed had difficulty recalling the number of days or nights spent in the desert, either due to disorientation, trauma, or hallucination. In some interviews, migrants recollected situations when the time structure from their life at home would suddenly fold into the time scale of border-

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<sup>21</sup> For further discussion of social roles and rules, see Chapter Three as well as David Spener’s ethnography of *coyotes* (guides) in Texas (Spener 2009).

crossing. Geologic time (being in the middle of nowhere with no modern conveniences) is punctured by modern time (a piece of technology like a cellular phone or a memory of childhood or of family life back in Mexico). For example, a 48-year old woman, Isabella, relayed how after she and her husband were separated from their coyote and group, they fell asleep near a highway. Sleep took over and then: “There we were, sleeping in the middle of the desert and my alarm went off... It made me laugh.”

In addition to its form shifting time and thus also bodily performance and deflection of the gaze, border-crosser architecture also supports counter-surveillance in its siting. While building atop ridges can expose the structure to helicopter fly-bys, it can also provide a perfect vantage point for observing Border Patrol activity. According to interviews with migrants and drug mules, these structures are most often built and inhabited by ‘points’ – people who stay in the desert for days at a time, camping out, radioing to guides and drug mules about when it is safe to come out of hiding and continue walking. Emmanuel, a migrant and drug mule, said, “They [the cartel] have points everywhere. They [the points] have like caves or tents. They stay there like 3 or 4 days, or a week. And then they [the cartel] get somebody else to go in.” Because of the points’ job, and thus also the affordance of power which cartel affiliation provides, they have more time to build and their structures can and must be more permanent as well as strategically sited as a vantage point. In other words, while still remaining cloaked, point structures aim to do the looking instead of being looked at.



Figure 6.1 Sitting atop a ridge, GP-01 has a strongly articulated stone wall, wood gathered for a fire, a firepit, and a floor covered in dry grass.

Only one of the structures documented during field work is very likely to be a point. GP-01 was situated high on a ridge of a steep mountain and was one of the most extensively formed huts with a rock wall, a small fire pit (hidden from view by the rock wall and also situated so that heat would deflect back into the structure), densely woven walls, and a thin-but-effectively-cushioning layer of dried grass on the floor [Figure 6.1]. These formal qualities suggest a longer-term stay and all-season capability. The interior was one of the most effective in deflecting heat out of all the shelters - even in the morning, it provided a lower 10-degree-Fahrenheit and lower 5.0 EV light reading from the exterior. The structure's dense walls grey out the light of day and successfully cloak the inhabitant. When peering out from GP-01's small entrance, a phenomenal view opened: one could observe the access road in the valley below with Border Patrol

vehicles passing as well as see Bavoquivari mountain (a commonly used landmark for orientation).

### **Transience**

The border wall separating Nogales, Arizona, United States from Nogales, Sonora, Mexico is about ten miles long and 15 to 30 feet high (Stephenson 2011, Binelli 2017, Block 2017). It horizontally undulates over the landscape. A horizontal wall, according to Thiis-Evensen, "rejects and shuts out" (Thiis-Evensen 1987, 145). A wall "expresses *weight* against the ground... such a space conveys no urge to pause, to turn and enter. A horizontal wall is... an obstacle, because the interior it hides is not our concern... [the interior] is led past us" (Thiis-Evensen 1987, 143). The wall is also a flat wall, neither concave nor convex, which "tells us nothing about the inside-outside relationship... it is a stiff and impassive plane" (Thiis-Evensen 1987, 145). And yet the wall is not solid. Instead it is comprised of metal slats through which you can watch, smell, and hear the world go by on the other side. Your body experiences what it cannot occupy, from a distance. The border wall is intended to divide and to endure. Border-crosser architecture thus operates in opposition to these principles: it penetrates and is ephemeral.

When crossing the border, guides impose many rules regarding movement; migrants are often denied any time to rest and when they do, their resting period is determined by the guide. Guides must plan their route and schedule around burreros moving drugs and Border Patrol shifts. The patterns of movement are thus syncopated, irregular, and highly variable across groups and depending on specific conditions. There are dead spaces of waiting followed by hyperactive scurries. Sofia, age 30 from Puebla,

said, “Yes, we walked three [days]. The first day we did walk a little bit slow, but the second day we walked really fast and on the third day even faster. They wouldn't let us rest. Maybe five minutes and then we'd have to keep walking. Maybe then five minutes more.” Border-crosser architecture is sited amidst these pulses and thus must anxiously sway between permanence and flight as well as territorial strongholds and fearful ephemerality and so can never fully be itself as architecture or shelter.

Instead of boldly standing at the front of the battle line in bright red regalia, boasting nationality and bravery, the battle of clandestine border-crossing is about slinking into the bushes, waiting, whispering, and evading. While constantly being on the move and being invisible can be exhausting, in a landscape full of surveillance technology, they are also the most important tactics of invasion. The structures built by border-crossers must expend as little time, energy, and space as possible. The burrero did not want to leave any evidence of his stay or route behind. When something is left behind, it can be hijacked.

The landscape is alive with technology, sensing every step taken, every mistake. Thus the very existence of architecture can reveal the recent presence of border-crossers and their routes. Border Patrol can increase surveillance in these areas and so the structures can endanger future border-crossers. Coyotes, the guides who lead migrants across the border, know this very well and often tell their groups they cannot build anything. Under these conditions, sometimes architecture cannot even be built, as Benjamin said: “There wasn't time to even rest. We just kept walking, kept walking to get there quicker...No, there wasn't time to construct anything. We just stuck ourselves under branches.” However, while migrants are not allowed to build anything, their

guides sometimes do. Other times, migrants build small structures but their guide positions himself away from the group so that if the Border Patrol comes, he can simply abandon the group. Sofia said, “We were in other little houses. [Where did your guide sleep?] Sometimes he slept away...” ESP-A is one example of a guide structure positioned to watch over a migrant group but also to capitalize on distance from the group for a fast egress. It is perched in the middle of a hill, saddled in a wash, with a perfect aerial view of CON-B, a very large cluster of artifacts some meters away.

When border-crosser architecture is built, unlike most contemporary, formal architecture, it cannot not have a proper foundation that digs into the earth. Foundations establish territory, permanence, and stability amidst erosion, zoning regulation changes, and border disputes. But structures in the desert are rarely defined by these characteristics. They are built to last a short time for a variety of reasons. One is most obviously that people use only what is available in the desert for building material. There is no concrete and no glass, no rebar and no uniform planks of wood. Instead, there are small branches, arid grasses, a few moveable rocks, and little more. The packed-down and scorched desert floor makes any digging nearly impossible. Like everything else, these materials age and wear out quickly due to the climate. Wind and water erode the earth and all that surrounds it so that thatching comes loose, supporting ‘beams’ come loose, and new flora spreads between and over vulnerable building. To make anything air tight and resilient to wear requires not only material resources but also time, which is in short supply in the desert.





Figure 6.2 Two pairs of make-shift slippers, fashioned from scraps of blanket and plastic twine, lay abandoned off the migrant trail.

Akin to De Certeau's conception of walking as a practice to invent spaces, border-crosser structures aim to be anti-architecture: "Within the structured space of the text, they thus produce anti-texts, effect of dissimulation and escape, possibilities of moving into other landscapes, like cellars and bushes..." (Certeau 1984, 107). Border-crosser architecture must erase itself and appear to be a mere bush or pile of detritus in a wash. It must evade permanence because for border-crossers, architecture is a visible, exposing trace. Just as migrants and drug mules wear 'slippers' made from carpet or other fabric that they place over shoes to erase their footprints as they are



walking [Figure 6.2], so, too, architecture works to create absence where there is presence, to erase the body. Just as the makeshift slippers endanger people's physical well-being when crossing slick, rocky terrain, so, too, does architecture take a toll for its masking role. For every reward there is a risk. People know this. When one young man (a burrero and a coyote) was asked about building shelters in the desert, he proudly replied that he built them in less than fifteen minutes, stayed in them for as long as necessary, and then immediately destroyed the structures when he was on his way.

TH-01's roof is fashioned from velvet ash branches, imported from trees on a nearby ridge – it seems time was taken to not only use immediately available materials from the mesquite shrub but also to bring branches from further away. The builder was patient, focused, and had time to spare. At the same time, TH-01 lacks any rock foundation and instead relies structurally on long, thin, y-shaped branches that reach out diagonally from the ground. This light footprint on the earth allows the structure to be easily destroyed and erased if needed. The delicate frame of the building suggests it is ready and able to disappear at any time, much like its builder.

### **Marking Death**

The number of border-crosser deaths and missing persons in the borderlands is staggering. According to Border Patrol's Sector Profile reports, in the Tucson sector alone, there were 194 recorded deaths in 2013 and 177 recorded deaths in 2012 (United States Border Patrol 2013, 2012). These numbers, however, do not account for the uncountable missing people or bodies that are never recovered (Rubio-Goldsmith 2006, Stephen 2008). Between 1990 and 2013, the leading cause of death (45%) of recovered bodies examined by the Pima County Medical Examiner was exposure to the

elements (hyperthermia or hypothermia often coupled with dehydration) (Martínez et al. 2014, 271). In many of our interviews, border-crossers frequently expressed their greatest fear to be running out of water, being lost, and dying in the desert. In this ominous landscape, the persistent threat of death creates preoccupations and anxieties.

Border-crosser architecture haunts the landscape with the restless souls of border-crossers and their abandoned objects. The landscape can be eerie and spectral. One woman we interviewed said that during the nights she dreamt of a dead grandmother and another said she was torn awake by the shrill, terrifying cries of coyotes. But much of the borderland's anxieties of death seem to manifest during the exposure of the day: "...all things are called uncanny which should have remained secret, hidden, latent, but which have come to light" (Vidler 1992, 12). A few migrants who we interviewed reported seeing bodies or human skeletons when crossing. Camila, age 18, said: "I saw many bodies like, when there is a body and they put rocks on it. I don't know if there was a dead body there but I was scared... The first time we did see one [a body underneath rocks]. We just saw the feet that were uncovered and clothes to one side, but you could see there was a cadaver there."



Figure 6.3 A rock cairn of unknown origin atop a hill in the borderlands. Trails are visible in the near distance.

Arizonan prospectors and ranchers in the borderlands stack rocks to mark claims or to delineate property boundaries, and yet even these innocuous markers become insidious triggers for an anxiety of death [Figure 6.3]. When we showed Isabella a photograph of a rock cairn and asked what it was, she immediately asked if they were covering dead bodies. She then said she saw human remains in the desert: “I don't know if they were girls or two boys or if it was a couple or if it was a parent with their child but the skeletons were wrapped up in each other. Purely bone... I thought that's how me and my husband would end up.” Whether or not she in fact saw human skeletons, she saw something in the desert and her mind saw them as skeletons which underscores the extent to which death codes the borderlands. Furthermore, her identity

became bound up with the skeletons, anxiously projecting her possible future (death) onto them. Because of this strong association, after having seen one pile of rocks covering bones, she then begins to see all piles of rock as a marker of dead humans. As Stallybrass reveals, objects “take on a ghostly existence, emerging to prominence, or even to consciousness, only at moments of crisis” (Stallybrass 1993, 39). Thus in a landscape of conflict and crisis, things like rock cairns in the borderlands begin to be otherworldly, inciting fear and serving as an unrelenting reminder of one’s proximity to death.

Like cairns, border-crosser architecture becomes a kind of spectral marker. The half material, half immaterial structures can at once be a mode of orientation (here is where I am or where I will go), and an unsettling bit of one’s own remains (someone used to be here, have I been here before?). Because of this dual nature, an anxiety of being lost, that is, feeling displaced no matter where one is, emerges. Felipe told us “Everything seemed the same to me. I felt like I was going in circles” and Mariana, age 25 from Mexico City, said “No. It’s such a large, extensive place. It doesn’t have an end. There’s no end.” The migrants and their building become stuck like a ghost in purgatory: “only to find [oneself] back, sometime later, in almost the exact same spot from which [she] had set off... this is the ghostly reproduction of the self” (Hill 2013, 392).





Figure 6.4 At left, two jackets are underneath the tree upon which FP-01 is built. At right, a jacket recovered at BW-01; the lighter, faded parts are those which were exposed to the sun, the darker parts faced the ground.

Border-crosser architecture haunts the landscape with the restless traces of border-crossers and their abandoned objects. Inside FP-01, two dark blue fading jackets lie limply on the ground. From a distance, it is indiscernible whether the two lumps of fabric cover a dead body in fetal position or simply billow an almost imperceptible hot breeze, a false breath, into the jacket's chest cavity. It is enough to make one approach with caution and a quickened heart. One of the sleeves reaches up from the shallow grave of a few inches of dirt that accumulated on top from wind and water. The fabric has been bleached, faded, and cracked by the unrelenting sun [Figure 6.4]. The decaying roof, no longer able to withstand its own weight, sheds a few tufts of

dry grass and casts strong, geometrical sunbeams that etch the surface of the jackets with discoloration.

In the desert borderlands, danger lies less so in the hidden and the shadows (for darkness actually offers repose and refuge) and more in the light of day and that which is lain bare. Martina, age 27, conveyed this terror: “It was very hot there. The earth is cracked -- it was cracked. And even the rabbits, deer, everything is dead... all of their skulls... corpses. And I was at the edge of my death. It’s as if it’s taking me to my death now. It horrifies me [*me mortifica mucho*].” Martina oscillates between present tense and past tense, correcting herself that she is not currently still in the desert. And yet, she still feels the pull of death even after she is out of direct danger. The trauma of death persists. The anxiety border-crossers express of being torn between life and death, past and present, also surfaces in the construction of border-crossing architecture.



Figure 6.5 At left, OJ-01's curved butterfly roof made of ocotillo stalks. At right, TH-03's lean-to walls made of dry branches. Both resemble rib cages or skeletal remains.

Structures like OJ-01 and TH-03 are the exposed remains of architectural bodies. Their curved roofs and walls jut up like starved and hollowed rib cages [Figure 6.5]. The thatching of grasses, desiccated by the sun, peel away like mummified skin, exposing the slightly damp interior to the sun’s penetrating rays. When migrants or drug mules



leave, their architecture stays behind like a shed skin or a gutted carcass, a haunting of a passing life. Sometimes the structures surrender to the climate, other times they are destroyed out of necessity, to erase traces. Either way, the ruins become restless remains: “This house-cleaning operation produced its own ghosts, the nostalgic shadows of all the ‘houses’ now condemned to history of the demolition site. Once reduced to its bony skeleton...” (Vidler 1992, 24). These skeletons can become symbolic stand-ins for the loss of home, of being in transit, neither of this realm nor completely of another. Border-crosser architecture is part of the constant motion of border-crossing, creating shadow selves and ghostly traces. Just as, “The long poem of walking manipulates spatial organizations, no matter how panoptic they may be... it creates shadows and ambiguities within them,” (Certeau 1984, 101) the structures begin to embody the very limbo (in passing), they and their builders, inhabit.



Figure 6.6 On left, a ring of pebbles Nicolas created to demonstrate how he built a structure in the desert (his shoe is in the corner of the image for scale). On right, the remains of a structure CWII-R, three meters wide and three and a half meters long.

The skeleton of architecture is a set of remains, a trace of absent border-crosser bodies. Without border-crosser architecture and their artifacts, the body is easily lost in the landscape. Bodies decay rapidly under the hot sun and the remains are

skeletonized and distributed by scavengers (Beck 2015, De León 2015, 75-81). The monsoon rains and winds coupled with the local flora and fauna work quickly to separate flesh from bone and body from land. The structures are traces, narrative markers of someone's presence and someone else's journey.

Long after the walls and ceiling of a structure have been destroyed or eroded, the foundation remains. Most border-crossers whom we interviewed said they built their structures on top of a ring of stones. This is one of the more common and conscious design interventions, replicated across many sites (or at least at sites that had available nearby rocks). In fact, one man even made a model of the foundation during our interview in Nogales, Mexico [Figure 6.6]. Three weeks later, almost an identical foundation was found in Arizona, without any other building elements remaining aside from a few fragments of dried ocotillo cactus branches [Figure 6.6]. Migrants claim that this rock ring, aside from being structural, also prevents snakes and other unwanted animals from entering. Thus, even when the trunks or branches of stout trees support constructed walls and roofs instead of a foundation, rocks still often line the circumference of where the walls meet the ground, almost like a chalked outline of a body at a crime scene.

The lack of object constancy (knowing something will remain even when one is separated from it), coupled with a lack of official ownership over building, creates an indeterminate and unstable architecture. Here one moment and gone the next, while still potentially leaving behind a detectable trace that will expose the builder and lead to their capture, disorientation, or fatality. The spectral traces of others who came before - their scent, their molecular detritus - also linger as though they are still there. Just for a



moment. Border-crosser architecture helps to sustain life while also being a constant reminder that death is impending. No matter how effective the intervention of building can be, there remains the persistent, inevitable, insurmountable anxiety of death.

### **Conclusion**

The US-Mexico borderlands are formed by the policies that attempt to prevent and deter unauthorized migration and by various groups of people who strive for power and territory. As such, the rules of engagement for the political landscape have been established - Border Patrol agents 'hunt' migrants, migrants play the role of the docile and cooperative prey, and the whole game resets and repeats (Donato, Wagner, and Patterson 2008). While this pattern certainly appears eternal and inescapable, border-crosser architecture exists to both mitigate and complicate the relationship between border-crosser, environment, politics, and other people moving in the landscape. This chapter sought to answer the question of the capacity of an architecture to resist a controlling landscape and present a few of its specific counter-strategies.

While at times structures can establish a territory or stronghold, it is still anonymously built and no one can legally stake a claim to it as property. While it works to protect its inhabitant and give shelter, it at the same time tries not to look like architecture. Just as migrants are trying to be invisible and anonymous with camouflage or walking at night, anxious architecture tries to be "not there" while still trying to enclose a space and not get lost in the unknown of the borderlands. It is an architecture that struggles against itself and external forces that undo it into not-architecture. It constantly

encounters the looming death of itself.<sup>22</sup> While the political harshness of spaces of conflict, movement, and capitalism have been defined as “non-place” (Augé 1995), border-architecture architecture can embody human agency in an otherwise dehumanized landscape and offer a temporary stronghold of territory in otherwise displacing conditions. While border-crosser architecture often arises more out of a tactical maneuvering of environment than an overt manifesto or act of rebellion, it nevertheless becomes an entity of resistance. Not just through the activities that take place inside or beside it, but through its very form and siting.

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<sup>22</sup> This kind of paradoxical self-destructive behavior in order to ensure survival, brings to mind Paul De Man’s framing of theory as a self-resisting entity: “Nothing can overcome the resistance to theory since theory is itself this resistance...theory is not in danger of going under; it cannot help but flourish, and the more it is resisted, the more it flourishes, since the language it speaks is the language of self-resistance” (De Man 1982, 20).

## Chapter 7 Conclusion

Architectural discourse goes through stages of folding into itself seeking autonomy and reaching out beyond its disciplinary and professional confines. Over the years, people have challenged the top-down "modern architect proclaimed as expert" formulation (Carstairs 1953, Fry and Drew 1956) to find alternative bottom-up design interventions (Colquhoun 2002). This has taken various guises such as creating architecture more "indirectly" through business management (Speaks 2000), technology and objects (Banham 1996), participatory design (Schuler and Namioka 1993), and infrastructure (Cruz 2010). The boom in literature on informal 'slum' architecture in the past twenty years (Davis 2006b, Koolhaas et al. 2005, Kramer 2006, United Nations Human Settlements Programme 2003) hints at yet another turn to the outside world to teach us things about the built environment.

In the case of border-crosser structures, we see an alternative to framing informality of the built environment. Most obviously, these huts are not situated within an urban context nor even particularly in a rural one. Each of the constructions are as identifying, and variable, as a fingerprint. Across 40 structures, while there are some patterns or similarities, overwhelming dissimilarity is the standard. Each structure's site, materiality, form, size, and usage differs, whether slightly or markedly, from the next. So while there are common cultural and political forces impacting the architecture, the individuality of the architecture highlights the designer, not as a faceless organic

process but as an individual actor making an intervention into the world. This opens the door to the informal builder becoming not just a cog in the machine of vernacular cultural production, but an architect of her domain. The architecture and the architect become particular and active.

This dissertation has sought to move beyond the initial reading of border-crosser structures as a mere pile of branches built blindly out of circumstance. Instead, the structures exhibit a complex constellation of forces. As ephemeral and *in situ* responses to these forces, “Temporary structures, built quickly and in connection with a specific occasion, have this intrinsic connection with the establishment of event phenomena, for they tap into essential ‘of the day’ ephemeral qualities” (Kronenburg 1998, 7). So while the context of border-crossing is extreme in many regards, it is also not anomalous and still represents the everyday experiences of crossing the desert. Simultaneously, these structures respond to Border Patrol surveillance technologies, social territories, emotional upheaval, and environmental systems. The extreme meets the common.

This research triangulates findings within the framework of a case study using a variety of research methods and tactics. It takes the structures themselves, artifacts in and around them, as well as interviews with UBCs as primary data sources in order to investigate the relations of politics, environment, and experience in the borderlands. Through triangulating three schools of thought (structuralism, phenomenology, and critical theory), we are able to reflect upon the social and identity structures of the architecture along with the meaning of, attachment to, and existential properties of the structures (often referred to as ‘place’ or ‘place-making’) without neglecting the harsh realities of politics and struggle. Multiple primary data sources - including the structures

themselves, artifacts in and around them, as well as interviews with UBCs - serve as a means to investigate the relations of politics, environment, and experience in the borderlands.

Despite the thematic divisions of this dissertation, the ways in which role, refuge, and resistance play out in the borderlands are far from mutually exclusive. Quite the contrary, these forces and themes interact in ways that undermine, enable, and complicate one another. Each way to characterize border-crosser architecture is thus incomplete and non-autonomous, enmeshed together. The structures are as intricate as they are banal, as intuitive as they are tactical, and as much of a sanctuary as they are a prison.

Border-crosser architecture underscores the ways in which architecture is shaped by hierarchies and purposive roles (what one aims to do in a place). It also highlights the ways in which social roles and identity mutate in any context, but especially during border-crossing. Because the structures are informal, they are not subject to any institutional building regulations. This makes their boundaries quite porous since there is no building code to guarantee safety or quality, or any land or building ownership to delineate territory. Essentially the laws of border-crosser architecture are the laws of the land: the policies set forth by the United States government as well as the social rules among border-crossers, Border Patrol agents, and other actors such as humanitarians, local residents, and environmentalists. Thus when a structure is built, they are often re-inhabited and re-formed by those who follow, intentionally destroyed to erase traces of trespass, and altered by plants, animals, and weather patterns. The traditional categories of user, designer, and client overlap and the

identities of the people who interact with the structures are as ambiguous as the origin, form, and intent of their structures.

Uncertainty also affects the capacity of border-crosser architecture to provide physical and existential shelter. The idea of refuge draws heavily on positive valuations of place and dwelling where one can have a meaningful and lasting connection to place. The structures are out in 'nature,' an environment that has been praised for its restorative properties over that of 'urban' or man-made spaces (Kaplan 1995, Ulrich 1981). Even border-crossers, who often suffer the consequences of the wilderness, have revealed their fondest memories of the desert to be those when they looked out across a vista, listened to the birds, or were under the stars. One middle-aged man, Ramiro, crossed the border three times and now lives undocumented in Detroit. When asked about his last crossing in 2009 he recalled:

One of the memories that struck the most was one night when we were high up on in the hills. The guide saw a light in the sky and supposed it was a Border Patrol helicopter. He told us to look down so that they wouldn't see our eyes, like when you're driving at night and you see a deer's eyes or something like that from the lights of the car. Well, [laughing] I looked up and the sky was completely brilliant in the desert. Lots of stars. And in that moment I felt like a human because looking at the stars reminded me of my childhood when my best friend Alberto and I bought a telescope to look at the stars and used an encyclopedia to look at what each one was.

Refuge frames architecture as possessing the power to restore, functioning as a shelter from existential threats and as a site of healing, a connection to self and home, and a feeling of safety. At the same time, border-crosser architecture is built in a state of emergency and thus arises not out of a leisurely respite from everyday life, but from a need of survival. Even while enjoying the scenery, one must adjust behavior and follow rules to avoid detection. In the same way, the structures can provide some degree of respite and yet, because of the landscape of surveillance in which they are seated, the

structures threaten to betray invisibility even as they seek to create it. This is neither an instance of traditional place-attachment where there are long-term repeated encounters with a single site where one becomes 'rooted,' nor is it a condition of placelessness where people live an abject, oppressed life with no recourse or moments of transcendence.

Architecture's power to provide refuge is fraught, as if it a double-agent, constantly providing intel to all sides of a conflict, betraying its own creator by divulging some information if it means being able to survive another day. Architecture is complicit while it resists. In some instances, the resistance of architecture is made explicit, as a guiding design principle (Lydon and Bartman 2012). Yet in these cases, the risk and consequences of building are for the most part very low – at most a citation from a police officer or a warning to dismantle the work. This is not the case in the borderlands. During border-crossing, the stakes for the smallest everyday actions are higher: detection, detention, and deportation or disorientation and possibly death. Thus border-crosser architecture operates similarly to border-crossers in its clandestine adaptations to the surrounding conditions, whether that be through counter-surveillance or through an unconscious form of resistance like simply being and persisting through the threat of erasure. These measures do not ensure safety, stability, nor substantial change and thus do not constitute a complete resistance. Nevertheless, the ways in which the structures and border-crossers negotiate their environment is a crucial way in which they even under dire conditions, they display some control and agency over their own journey.

## Implications for Design

While this dissertation has engaged the architecture of border-crossing, investigating its short-comings, its affordances, and its way of being in a larger socio-political context, it does not strive to find or identify a solution, architectural or otherwise, to the difficulties in the desert. It may be quite intuitive for many of us to leap to the question: Well how can we, as designers, intervene, to create a lighter, more adaptable, invisible shelter that will negate territorial disputes, protect those who we want to protect while subverting those whom we want to subvert. There is no doubt a design problem here. These little huts could be more durable, more comfortable, more aesthetically pleasing, and so on. The brute reality is that people are dying in the desert. Should architecture do something? That desire to act may in many ways be a noble driving force of the profession – to help, to make change. Yet often this intervention is done at the expensive of understanding in the manifold ways in which architecture impacts its surrounds.

Border-crosser architecture does much to expose the ways in which architecture is bound up in morality. All architecture supports certain values over others, houses certain things while excludes others, and intervenes into messy political and cultural contexts. In the case of the borderlands, there is the question: who would a professional architectural project protect? Even among the border-crosser group, there are men, women, children, elderly, Central-Americans, Mexicans, light-skinned people, dark-skinned people, illiterate people, trilingual people... the combinations and permutations of demographic characteristics are broad. Their roles in the desert are equally variable. Some people start as migrants and become drug mules. Some *coyotes* are friends to



migrants, others are cruel. Should an architecture provide aid to everyone and anyone, regardless if this means abetting a Border Patrol agent in using excessive force, someone crossing drugs to pay for his sister's way across, or an abusive husband to get closer to his wife who has fled him? Where do we find a moral compass to select a user base for an activist architecture and how would an architecture be accessible only to them? While these issues are present in every architectural enterprise (someone always stands to benefit while others pay a price), these issues are exacerbated in the border-crossing context. The architect must constantly interrogate her own ethics and values.

There are other pragmatic considerations along these lines - i.e. seemingly simple or pedestrian issues have giant ripple effects. Were one to design a portable shelter for a border-crosser, how can one justify adding even two pounds to someone's load when those two pounds can be water instead, something that is literally a life or death resource? Or maybe one designs stationary shelters to supply water and first aid or landmarks to limit disorientation. How does one prevent Border Patrol from turning them into traps, or from border-crosser folklore (often justly) propagating fear and suspicion of these more institutional interventions? How can one adjust shelters to the ever-changing climate and border-crossing routes? How can one prevent the cartel or bandits from taking control over these stations?

What emerges out of this project is less the identification of a design problem that needs to be solved and more an understanding that self-built architecture becomes a unique microcosm through which we can understand complex and dynamic environments. Through an integrative approach of multiple schools of thought and

methodologies, we can bring to light the overlapping and interacting dimensions of spatial construction and inhabitation. More pragmatically speaking, this dissertation's interdisciplinary methods may serve as a model for architectural site analyses to include both material culture and phenomenological experience. Analysis of a building site via an archaeology of the contemporary can lend breadth and depth to our understanding of what a site was once used for and by whom.

Instead of approaching a design problem solely through site, program, and the intended user, one can incorporate the previous incarnations of the space: those who used it who may be displaced by new building, the environmental and ecological dimensions of a site that may be disrupted, and so forth. In other words, archaeological and anthropological methods can inform architectural practice by giving access to the traces and voices of life in spaces that we may erase, code, and bulldoze over.

### **Limitations and Possible Extensions of Research**

The subject of this dissertation's inquiry is limited by its geographic, cultural, and temporal specificity. The border-crossing process has undergone substantial shifts over the past decade: group size has decreased, migration has shifted into Texas, routes change in response to Border Patrol presence, and so forth. Thus the border-crossing structures, though only a few years old at the time of this writing, are already artifacts of an obsolete process. The contemporary has rapidly become the historical.

Nevertheless, there are a few ways in which this research can move forward adjacent to the scope of this dissertation. Extending the study over another five years would lend a temporal framework to track change over time, both in the ways in which the structures respond to climactic changes, how they are modified, and how their siting

and form changes in response to shifting border-crossing patterns and Border Patrol routes. A comparison between the border-crosser architecture of the Sonoran Desert to that found in more urban areas such as Tijuana, California could shed light on material affordances as well as highlight possible regional differences in border-crossing strategies.

In order to parse out the degree to which border-crosser architecture is influenced by material affordances and/or cultural forces, one could compare the structures with those built by the Tohono O'Odham and other Native Americans of the great basin. This would in part help differentiate between the impact of the nearby environment and experience versus that of political context on architectural form. A comparative study between the structures built by migrant farmworkers, such as those mentioned by Leo Chavez (Chavez 1998), would also further explore the intricacies of political, affective, and material forces on architecture under different conditions but built by a similar cultural group.

Moving beyond the United States context, this research in its particular method could be applied globally to other areas of clandestine movement over national borders. Unauthorized migration, although taking place across different national borders and with varying political conditions, have common contexts such as heavy surveillance, dangerous natural terrain, physical barriers, and informal social, temporal, and financial economies. In the ever growing field of migration and border studies, continuing an engagement with the personal spatial constructs that overlap those set forth by legislation, politics, and natural features can further enrich theories and studies of migration. In particular, echoing the framework of the dissertation, informing

intersubjective social relations mediated and constructed through architecture, the ways in which dwelling and place-attachment occur in contested terrains, and the material forms and practices of everyday resistance. In the realm of place experience research, the three-part analysis of this dissertation can be used to research the complexity of place attachment.

To write about the ways which we connect to space and shape ourselves through is a lofty aim which benefits from grounding. Whether specific to the contemporary U.S-Mexico border or more broadly reaching into the relationship between self-built architecture as an intervention into our complex psycho-social worlds, this dissertation attempts to create a space in which the voices and experiences of those we write about merge with the material architecture we document and the political forces we critique. While this can result in an indeterminate analysis full of overlaps and contradictions, it does highlight the phenomenological reality of the borderlands and beyond – one that at times seems oppressively structured and other times exhaustingly indescribable.

## Appendices

### Appendix A: Structure Form

site ID \_\_\_\_\_ site name: \_\_\_\_\_ structure #: \_\_\_\_\_ est date active  
\_\_\_\_\_ date: \_\_\_\_\_

#### LOCATION + LANDSCAPE

GPS coordinates \_\_\_\_\_ N \_\_\_\_\_ W elev \_\_\_\_\_ (m)  
[on path] [just off path] [near path] [hidden from path]  
[ridge] [mid-mountain] [lower-mountain] [wash]  
[mostly-flat] [mostly-hilly] [very-hilly]  
[under-tree] [off-tree] [self-standing] [over waterway] [against rock] \_\_\_\_\_ rocks  
present? [N] [Y]  
animals present? [N] [Y] [rattlesnake] [snake] [lizard] [spider] [centipede] [fire ants]  
[vulture]  
flora: [mesquite] [ocotillo] [saguaro] [teddybear cholla] [rubber rabbitbush] [three-awn  
grass]  
[buckhorn cholla] [prickly pear] [agave/yucca] [juniper] [oak] \_\_\_\_\_  
sounds: [helicopter] [cicada] [plane] [atv] [rumbling wind] [birds] [crickets] [buzzsaw  
cicada] [jet]  
border patrol sighting? [N] [Y] \_\_\_\_\_

#### ARTIFACTS

nearby artifact inventory form? [N] [Y] \_\_\_\_\_ #Total artifacts: \_\_\_\_\_ artifacts  
collected? [N] [Y]  
visible expiration dates? [N] [Y] \_\_\_\_\_  
gend. items? [N] [Y] \_\_\_\_\_ child items? [N] [Y] \_\_\_\_\_ hum. items? [N] [Y]  
\_\_\_\_\_  
drug items (burlap sacks, white sacks...)? [N] [Y] \_\_\_\_\_  
alcohol/drugs/cigarettes? [N] [Y] \_\_\_\_\_  
winter items (blankets, gloves, sterno...)? [N] [Y] \_\_\_\_\_  
# beverage containers + suero packets \_\_\_\_\_ # food containers \_\_\_\_\_  
# backpacks \_\_\_\_\_ # shoes \_\_\_\_\_ # clothing (pants, shirts, sweatshirts, etc.) \_\_\_\_\_  
# hygiene \_\_\_\_\_ # first-aid/med/health \_\_\_\_\_ # energy pills/drinks \_\_\_\_\_  
# accessories (hats, gloves, socks, underwear, etc.) \_\_\_\_\_

**CLIMATE MEASUREMENTS**

Time of day (24 hr): \_\_\_\_\_  
Wind direction (compass): \_\_\_\_\_° \_\_\_\_\_ [none] [breeze] [med] [strong] [howling]  
EV Ext Light (sun) \_\_\_\_\_ EV Max Int. Light (sun): \_\_\_\_\_ EV Min Int. Light  
(shade): \_\_\_\_\_  
Temp Logger? [N] [Y] ] Ext sun: \_\_\_\_\_° Int shade: \_\_\_\_\_° Set: \_\_\_\_\_ Strike:  
\_\_\_\_\_

**STRUCTURE SPECS (in meters - dir. of entrance taken from inside with compass)**

building materials: [plastic sheet] [blanket] [mesquite] [rocks] [grass] [velvet ash]  
[ocotillo] \_\_\_\_\_  
construction: [walls: 1 2 3 4] [ceiling] [lean-to] [thatching] [dome] [flooring] [circular wall]  
density of cover: [very low] [low] [med] [high] [nearly solid]  
condition: [ruin] [remnant] [decaying] [in tact] [new]  
number of rooms [1] [2] [3] [4] [ ]

max *h*: \_\_\_\_\_ max *w*: \_\_\_\_\_ max *l*: \_\_\_\_\_ Inner Circ. \_\_\_\_\_ Entrance Direction: \_\_\_\_\_° \_\_\_\_\_  
max *h*: \_\_\_\_\_ max *w*: \_\_\_\_\_ max *l*: \_\_\_\_\_ Inner Circ. \_\_\_\_\_ Entrance Direction: \_\_\_\_\_° \_\_\_\_\_  
max *h*: \_\_\_\_\_ max *w*: \_\_\_\_\_ max *l*: \_\_\_\_\_ Inner Circ. \_\_\_\_\_ Entrance Direction: \_\_\_\_\_° \_\_\_\_\_

Construction description (# branches, wall facing ridge, ring of stones, thatching, etc.):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DRAWINGS: [N] [Y] [2 section drawings] [floor map including artifact locations]

VIDEO: [N] [Y]

PHOTOS: [5m @ 18mm NSEW] [facing entrance] [interior] [artifact floor] [30m context photo]

## **Appendix B: Interview Protocol**

### **PERSONAL INFORMATION (SECTION A)**

***“I would like to start by asking you some questions about your background”***

- A1. What have you done for work? What was your last job?
- A2. Have you gone to school? How old were you when you last went to school?
- A3. Have you lived in the US before?
- A4. Are you married? If so, where is your spouse?
- A5. Do you have children? If so, how old are they? Where are they now?
- A6. Where is your other family? Do you have family in the US?
- A7. What other languages do you speak? What do your parents speak?
- A8. Did you talk to someone about what to expect when crossing the border and if so, what did they say?
- A9. What was true and what was false about what you heard?
- A10. What do migrants tell each other about crossing the border?

### **CROSSING QUESTIONS (SECTION B)**

***“I would now like to ask you some questions about your crossing experience.”***

- B0a. When was the first time you crossed (year, month)?
- B0b. Where did you cross?
- B0c. How long were you in the desert on the Mexican side? On the US side?
- B0d. How many people were in your group? Who was in your group?
- B0e. Did you cross with a guide?  
How much did you pay them?
- B0f. Did you arrive at your destination?
- B0g. When were you deported?
  
- B1. Have you tried to cross other times? [repeat questions above]
  
- B2. Did you walk in the night or the day? How many hours did you walk?
- B3. Did you walk on ridges or in valleys?
  
- B4. Why were you trying to cross?
- B5. What was your final destination and how did you decide to go there?
  
- B6. Did you make any friends along the way? Can you tell me a story about this?

B7a. Can you remember a specific moment during the crossing when you were thinking of home and tell me about it?

B7b. Was there a time when you were thinking about the place where you are hoping to get to?

B8. What did you think about most about when you were in the desert?

B9. What is your worst memory from the desert?

B10. Did you witness any violence?

B11. What helped you survive or keep going?

B12. Did you have any visions or hallucinations? If so, what did you see?

B13. Have you gotten sick or hurt in the desert?

B13a. Did you do anything to prevent getting sick or hurt?

B13b. How are your feet?

B14. If you have injuries, can we photograph them?

B15. Did anyone in your group get sick or hurt?

B16. Was anyone left behind and if so have you told anyone about this? Can you give us some information about her/him so we can try to find her/him? (name, age, where last seen, where from)

B17. Did anyone in your group die?

B18. Did you see any dead bodies while you were in the desert?

B19. Have you heard anything about dead bodies in the desert?

B20. Did you experience or observe a difference between men and women when crossing?

B21. Do you think the desert experience is different for Central American compared to Mexicans?

B22. What advice would you give to someone who is about to cross the desert?

B23a. What were you most worried about before crossing?

B23b. If you cross again, what would you be most worried about this time?

#### **IF INTERVIEWEE IS FEMALE:**

B24a. Were there times when you felt unsafe? What were they? What did you do to feel more safe? (dress differently? travel with friend? stayed awake at night?)

B24b. Is there anything else you'd like to tell me about crossing the desert as a woman?

B24c. Were you menstruating while crossing? If yes, did this affect your crossing?

B24d. Were you pregnant? If yes, how did this affect your crossing?

#### **ENVIRONMENT QUESTIONS (SECTION C)**

**"I would now like to ask you some questions about the desert"**

C1. ][ desert landscape ][

a: Was the terrain you crossed different or similar to this photo?

b: What do you remember most about being in the desert?



C2. ][ trail and mountain ][

a: Did you follow trails or avoid them?

b: Do you know anything about this mountain?

C3. How did you navigate the desert? How did your guide navigate the desert?

C4. ][ rock cairn and windmill ][

a: Did you see anything like this?

b: Did your guide use any points along the way to radio someone, rest, or gather water?

C5. ][ border wall and fence ][

a: How did you know when you were across the border?

C6. ][ ranch and city lights ][

a. Did you see any houses or lights?

b. What did you think about when you saw them?

C7. ][ cacti and animals ][

a. Do you recognize any of these plants or animals?

b. Did any plants or animals harm you?

c. Did you do anything to protect yourself from plants or animals?

d. Did you eat any plants or animals?

### **OBJECT-PLACES QUESTIONS (SECTION D)**

**“I would like to ask you about things and places you may have seen in the desert.”**

D1][ large and small migrant station ][

a: Have you seen anything like this while in the desert?

b: Do these places have a name?

c: What do people do there?

d: What did you think or feel about these places?

D2: Did *you* leave anything in the desert?

D3][ underwear tree ][

a: Can you tell me anything about this?

b: Have you seen this in the desert?

c: What does it mean and how do you know?

D4][ tunnel ][

a: Did you see any caves or tunnels along the way?

b: Who uses them and for what?

D5][ shrine ][

- a: Did you see any places with religious items?
- b: Can you describe where it was and what was there?
- c: Did anyone in your group leave something behind there?
- d: Did anyone pray there?

D6: Did you construct anything in the desert? Did your guide or anyone in your group construct anything?

- a: Why did you build it?
- b: Whose idea was it to build it?
- c: Who helped build it?

- d: Did you build it in the day or night?
- e: How long were you in the desert when you built it?
- f: Was it on the US or Mexico side?

- g: What was the weather like?
- h: Was it in the valley or on top of the mountain?
- i: Was it near a tree? What did you make it out of?

- j: How long did it take to build?
- k: How many people fit inside?
- l: How long did you stay there?

- m: What did you talk about when you were building it?
- n: What did you talk about when you were inside?
- o: What did you think about when you were inside?

- p: What did you do inside? Did you eat, sleep, rest, drink water?
- q: Did you build one every day? Why or why not?
- r: Did you destroy it when you left?

s: Did it look like any of these *photos*? ][ bordercrosser architecture ][

D7: Did you find or see any *casitas* in the desert?

- a: Have you seen something like this before? ][ bordercrosser architecture ][
- b: Do you have a name for these shelters?
- c: Who uses them and for what?
- d: Are there rules about these?

D8: Where (else) did you sleep or rest in the desert?

## **ACTOR QUESTIONS (SECTION E)**

**“I would now like to ask you who you encountered along the way”**

E1a. Did you encounter any bajadores?

E1b. Do you have any special ways that you prepared yourself to deal with bajadores?

E2. What kinds of things did you do to avoid Border Patrol?

E3. ][ helicopter + surveillance truck ]]

a: Did you see or hear any of these? Can you tell me about it?

E4: ][ cuffs ]]

a: Have you seen these before?

E5. Did you encounter Border Patrol? What was that like?

E6. Do you think there is a difference between white and Mexican-American agents in how they treat migrants? If so, what?

E7. ][ Samaritan car ]]

a: Can you tell me what this is?

b: Have you seen or heard of the Samaritans or any people from the church?

## **OBJECT QUESTIONS (SECTION F)**

**“I would now like to ask about the things you carried with you in the desert”**

F1: ][ tienda photos ]]

a: Where did you buy the things that you brought to the desert?

b: How much did you spend on these things?

c: How did you know what to buy or bring?

F2: Did you bring a plastic sheet or a blanket? What was it for?

F3: What kind of clothing did you wear?

F4: What food did you bring?

a: Did you run out of food?

F5: ][ water bottle photos ]]

a: How much water did you bring?

b: Do you recognize any of these bottles?

c: Did you run out of water?

d: Did you find water along the way and if so, where?

F6. Did you buy or bring any first-aid items like medicine or bandages? Did you use them?

F7. Did you buy or bring any hygiene items like toothpaste or lipstick? Did you use them? Why did you bring them?

F8. Did you bring any energy pills or drinks? If so, how did that affect your crossing?

F9. Did you use any drugs or alcohol while crossing? Did anyone in your group?

F10a. Did you bring anything from home or something that reminds you of home?

F10b. Did anyone give you anything to bring with you?

F11. Did you take any photos on your cell phone or camera when you were crossing?

F12. Did you carry any religious items?

F13. Did you carry identification? Was it false documentation?

F14a. Are you carrying contact information for family members?

F14b. If yes, is it in any special type of form or code?

F14c. If no, why not?

F15a. Are you currently taking any medication?

F15b. Did you bring it with you?

F16. Is there anything else that you carried that you think is important but that I haven't asked you about?

F17a. Is there anything you wish you had brought with you?

F17b. Are you likely to bring these items with you next time you cross?

F18. Can I photograph your backpack and the things that are in it?

F19. Can I photograph your shoes?

**IF THEY ARE A NON-MEXICAN NATIONAL, ASK THE FOLLOWING QUESTIONS  
(IF NOT, SKIP THIS SECTION)**

**CENTRAL AMERICAN MIGRANT QUESTIONS (SECTION G)**

F1. How have you been traveling?

F2. Have you stayed at other shelters in Mexico?

F3. Have you encountered Mexican immigration officials?

F4. Have you encountered Grupos Beta?

F5. Did you travel with a guide through Mexico?

F6. Have you tried to pass as a Mexican? Why? What did you do?

**CONCLUSION SECTION (SECTION H)**

**“Thank you very much for your patience during this interview. We appreciate your willingness to work with us and we hope that the information you have given us can be helpful for raising awareness about the conditions that migrants experience in the desert and along the border.”**

H1. Do you have any good memories from the desert?

H2. Is there anything you would like to tell me that we did not discuss in this interview?

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