BORDERING DESIGNS



CONTESTATION DESIGNS

An exploration of undocumented Nicaraguan women's everyday life in Costa Rica

SILVIA MATA-MARÍN

SCHOOL OF DESIGN | CARNEGIE MELLON UNIVERSITY

BORDERING DESIGNS | CONTESTATION DESIGNS

An exploration of undocumented Nicaraguan women's everyday life in Costa Rica

SILVIA MATA-MARÍN

DOCTORAL DISSERTATION

Submitted in partial fulfillment of the requirements for the degree of Doctor in Philosophy

SPRING 2020

ACKNOWLEDGEMENTS

Doing a PhD for the past four years has changed my life completely. This whole experience took me through paths of tremendous joy as well as moments of profound sadness. Throughout this time, I have been fortunate as I've had amazing people that have kept me company through all of it. To everyone who was there at one point or another, I am in your debt. I don't think I would have finished my PhD without your support and kind words of encouragement. In particular, I would like to thank my family, Papi, Mami, Gaby, Juan y Nano, muchas gracias por todo el apoyo que me dieron especialmente en momentos en los que era más fácil dejarlo todo tirado que seguir adelante con esto. I would also like to thank my other family, my chosen family, my friends who have shown me how they are my biggest fans even when I wasn't my biggest fan Flory, Manu, Sofi, Aquiles, Andy, María son las personas más lindis del mundo.

My deepest gratitude goes out to my brilliant advisors: for the past four years Dan Lockton has been an amazing support and advocate, he's been nothing but kind and patient. I cherish the many hours he invested in reading my work and providing feedback and valuable input. Without his trust in me and my work I don't think I would have been able to carry out and successfully finish this dissertation. Molly Wright Steenson kept pushing me to go beyond my initial ideas and encouraged me to be bold in my claims and own them, she got the value and the stakes of this work even before I did. Elizabeth Chin was such a joy to work with, her valuable insights on doing field work and ethnographic research were critical for the direction of this dissertation. To all three of them, I am profoundly grateful for the hours spent chatting, reading and proofing my work; I am really fortunate that our paths all crossed, and I hope to see you all again soon.

To everyone who has been part of this PhD program, all of my colleagues, all of your feedback, thoughts, and all the conversations we shared, they all provided critical input in my work and new ways of seeing and thinking.

The Universidad de Costa Rica provided me with invaluable institutional and financial support to conduct this research, I would like to express my gratitude to OAICE and Escuela de Artes Visuales por apoyarme en este proceso.

Mi mayor y más profundo agradecimiento va para las mujeres Nicaragüenses de Río Azul, mujeres listas, fuertes, resilientes, amorosas, generosas. A todas las que me compartieron sus historias, las que me recibieron en sus casas, las que me permitieron compartir con sus familias, las que me sirvieron café, las que me mostraron sus vidas; sin ustedes, este trabajo no existiría.

CONTENTS

ABSTRACT	3
INTRODUCTION A FIRST ENCOUNTER WHAT THIS DISSERTATION SEEKS TO DO INITIAL PROVOCATIONS STRUCTURE OF THE DISSERTATION	4 8 11 12
CHAPTER 1. THE NICARAGUA(N) — COSTA RICA(N) DIVIDE 1.1 A GLOBAL SYSTEM / LOCAL DESIGNS 1.2 CODED DIFFERENCE: THE COSTA RICAN NATIONAL IDENTITY 1.3 VAMOS AL SUR: SOUTH TO SOUTH MIGRATION 1.4 THE RIGHT TO HAVE RIGHTS	15 15 18 23 25
CHAPTER 2. THE MIGRANT CONDITION IS A DESIGNED CONDITION 2.1 DESIGN: SELECTION, MATERIALIZATION, AND CONFIGURATION OF LOGICS 2.2 DESIGNING (OTHER) HUMAN CONDITIONS 2.3 DESIGN AND POWER 2.4 DESIGN AND THE POWER OF LIFE	29 30 33 43 51
CHAPTER 3. RESEARCH IN THE BORDERS: A METHODOLOGICAL APPROACH 3.1 A FAILED WORKSHOP— 3.2 THE PROBLEM WITH THE UNIVERSAL 3.3 DESIGN RESEARCH IN THE MARGINS 3.4 A SITUATED DESIGN RESEARCH PRACTICE 3.5 DEVELOPING A CRITICALLY REFLECTIVE SOCIAL DESIGN STANCE 3.6 RESEARCHING THE BORDERS: ENGAGING UNDOCUMENTED NICRAGUAN WOMEN IN RÍO AZUL	55 60 64 74 79
CHAPTER 4. BORDERING DESIGNS 4.1. THE EVERYDAY AS THE SITE OF BORDER-STRUGGLES 4.2 FROM THE EDGES TO THE CENTER 4.3 FROM MASSIVE INFRASTRUCTURE TO DIFFUSED MATERIALITY 4.4 FROM SPATIAL TO TEMPORAL BORDERS 4.5 FROM INTEGRATION TO DIFFERENTIAL INCLUSION	88 88 91 99 112 114
CHAPTER 5. CONTESTATION DESIGNS 5.1 BORDER-CROSSERS: ALTERNATE SUBJECTIVITIES 5.2 REDES DE SOLIDARIDAD: UNVERIFIABLE PRESENT, SHARED FUTURE 5.3 THE EVERYDAY AS MICRO-POLITICAL ACTS 5.4 MATERIALIZING INFORMALITY: AFFECTIVE INFRASTRUCTURES 5.5 CLAIMING OTHER FORMS OF CITIZENSHIP	130 131 142 144 154 162
CHAPTER 6. CONCLUSIONS AND CONTRIBUTIONS TO KNOWLEDGE CONCLUSIONS CONTRIBUTIONS TO KNOWLEDGE & IMPLICATIONS FOR THIS RESEARCH FUTURE WORK	165 165 168 170
REFERENCES	172

ABSTRACT

The project of modernity reordered and rearranged the world by imposing categories of difference. These currently materialize in inconspicuous bordering systems designed to enforce the separation between the Global North and Global South; the west and rest; the have and have-nots: dualities continuously (re)produced today in the spatial arrangement of the world and in the domain of everyday life. This research focuses on the material possibilities afforded by design to scatter sovereign power— that was once exclusive to nation-state borders— and embed it in the sociotechnical systems that mediate everyday life. This dissertation presents a design-informed framework that situates design in contemporary practices of bordering— understood as processes of exclusion experienced by migrants that are (re)produced at the level of everyday life by state and non-state actors. I propose that by paying attention to everyday life we can uncover how design has been complicit in creating and perpetuating the undocumented migrant condition and how design has been used in the production of "illegality". In this sense, this research does not seek to uncover the power of design, but instead turns its attention to the ontological relation between power and design, the ways power dynamics materialize by design and how design (re)enforces power dynamics, put simply, it is an exploration of how power is designed.

Using the experience of undocumented Nicaraguan women in Costa Rica, I argue that undocumentedness is a designed technology of population management that materializes and legitimizes "illegality" while reproducing the colonial logic of difference between Costa Rica(ns) and Nicaragua(ns). This logic of difference, instrumental to the project of nation-building, is currently (re) produced by popular and political discourses that materialize in technologies of migrant management. Based on the experience of Nicaraguan women living in Río Azul — a marginal, urban neighborhood in the outskirts of San José —, and informed by critical border studies, decolonial theory, feminist theory, political theory, and critical geography, this dissertation locates everyday life as the site of border-struggles for undocumented Nicaraguan women.

This dissertation also considers counter-practices that materialize in the form of designs that emerge and operate from other logics, logics that are initially driven by state exclusion such as contestation and (in)visibility, but ultimately logics that build the communal and forms of autonomy. These forms of contestation use design as material politics, in this sense, design is used to reconfigure the material possibilities afforded by their undocumented condition and to redistribute these material possibilities as forms of emancipation.

INTRODUCTION

A FIRST ENCOUNTER

The first time I ever went to Río Azul, I was going to visit the center where the Vínculos organization is based and meets every Saturday afternoon. Vínculos is a grassroots organization made up by Nicaraguan women who are economic migrants—their term, and they use it to describe migrants, like themselves, that move to another country mostly out of economic need. While these could also be considered labor migrants, for them, the emphasis on the economic part is important because it sets them apart from high-skilled labor migrations. Most of the women that are part of Vínculos are domestic workers and most of them are undocumented workers.

The center is located on Calle Los Mangos, Ixchel—the woman that runs Vinculos and who I had met previously in her home in San José— called me a couple of days before to invite me to one of their weekly meetings at the center. She didn't give me a precise address for the place, she just told me to get off the bus at the last stop of the bus route and from there to go up la cuesta de Los Mangos for about 200 meters. She said I should call her cellphone when I got there so that she could meet me outside of the center. This might seem like an odd way of giving out an address, but Costa Rica is known for not having street names or numbers, so most addresses actually follow a format like this one.

I was running late that day and going by bus would've required taking two buses and two hours to get there, which is why I had opted to take an Uber. I opened the app and tried to locate the address, but the bus stop Ixchel gave me as a reference didn't show up. When the driver arrived, I asked him if we knew where it was, but he didn't. After a couple of minutes, I was finally able to find Calle Los Mangos on the map and I dropped the pin at the nearest bus stop hoping it was the right one.

The Uber driver seemed irritated from having to wait a couple of minutes until I could find the address, so I tried having a friendly conversation with him. He looked like he was in his late 20s, and he told me he had a college degree in Political Science but hadn't been able to get a job in his field since he graduated. He would drive his blue Hyundai Accent for Uber during the weekends and evenings when he wasn't working for Amazon's Customer Service Call Center in Heredia. He eventually asked me why I was headed that way, I explained to him, without going into a lot of detail, that I was doing some research regarding Nicaraguan migrants and it was actually my first time going to this center. To

which he replied, "sí, ud no parece como que fuera de ahí" "yeah, you don't look like you belong there."

At that moment I paused for a second and thought about all the potential implications weaved into that one sentence and none of them were good. I perceived this one remark to be a comment of my appearance in relation to the otherness that inhabits Río Azul. Río Azul is a marginal urban neighborhood located just outside of the limits of the San José province in La Union de Tres Ríos in the Cartago province. It is a neighborhood built around the site of the former sanitary landfill of Río Azul. It is known popularly that Río Azul is place where informal dwellings abound and it is the home of a large concentration of Nicaraguan migrants. The *otherness* that was implied by the college-educated, middle-class Uber driver's comment was in reference to this population of poor Nicaraguans.

This comment must not be analyzed in a vacuum, in fact it can be understood as the product of years of a nation-building project that resulted in a Costa Rican national identity that attributes ideas of egalitarianism, democracy, peacefulness and above all homogeneity (implying white) to the Costa Rican society. This national identity was built in relation to its Central America neighbors and Central Americans continue to be framed as the embodiment values that are oppositional to the Costa Rican identity. Due to the large population of Nicaraguans living in the country (it is believed that up to 10% of the country's population might be Nicaraguan born), this population, in particular, is characterized in ways that make Costa Rican perceived them as an internal threat, they are portrayed as undemocratic, violent, and more visibly darkerskinned. The Costa Rican project of building a national identity and imaginary has resulted in the idea that Nicaraguans are a racialized identity, and as such migrants are ascribed values that counter those attributed to the Costa Rican identity (I will elaborate more about the historical process of Costa Rican nation building and the underlying colonial ideas of difference in Chapter 1).

Racist narratives against Nicaraguan migrants have escalated since the 1980s when Costa Rica experienced its first massive influx of migrants fleeing the Nicaraguan civil war. Throughout the past four decades, environmental disasters, recurring political instability, and economic distress in Nicaragua have pushed thousands of migrants towards its southern neighboring country. With the rise of Nicaraguan migration towards Costa Rica, a proliferation of discourses framing Nicaraguan migrants as violent and responsible for the increased crime experienced in the country emerged. These migrants were also characterized as opportunistic and as drains of the welfare state. These discourses can be understood as reproducing the colonial logic that generated the initial difference between Costa Rica(ns) and Nicaragua(ns). This Uber driver's comment can be seen as part of the repertoire of racists remarks against

Nicaraguan migrants.

Was the Uber driver wrong? Not really. After all, I had never been to Río Azul. Río Azul is not a place that you go to unless you live there and it's not on your way to anywhere else. Up to that day, I only associated the place with a book that was mandatory reading in high school— Única mirando al mar by Fernando Contreras. The book features the story of Única, a retired school grade teacher, who was part of a community of buzos [divers], in the Río Azul landfill. These trash pickers spent their days scavenging through the mountains of waste in the country's largest landfill in Río Azul looking for any valuables or food they could live off. In the book, Única lived in a makeshift shack that was part of the network of informal dwellings that had sprouted around the landfill. Today, the landfill is no longer in operation, but the dwellings described in the book still remain. The community center I was headed to was housed in one of these structures that had been erected from waste and debris discarded from the households of wealthier families that lived far away from the toxic soil and fumes of the former landfill.

The Uber finally arrived at the bus stop I found on the app's map. The ride took about 30 mins from where I live in San Pedro de Montes de Oca, it felt like a long ride for a place that was less than 10 km away. After looking at the narrow, steep road that led to the Center, the driver told me that he couldn't drive me up that way because it would be impossible for him to turn the car back around and go down the same road, so I agreed to get off at the bus stop and walk the rest of the way. It was an unusually warm day and about 100 meters up the street I could feel myself running out of air, the road got steeper as I went on, I could feel the sweat running down my back.

There were a couple of people chatting along the road, some of them sitting on their doorsteps, others sitting in bright white plastic picnic chairs that were lined up on the side of the road. There are no sidewalks on either side of the street, but there are these large rain gutters separating the road from the front of the houses. People walk in the middle of the street, a couple of motorcycles come blasting down dodging the pedestrians. I kept on going up the road and on my right hand, I could see an alameda, a steep dilapidated stairwell that was lined on both sides by houses made out of rusty zinc sheets. I had no idea if I had gone up the 200 m from the bus stop, it felt like I had been walking for more than that.

I took out my phone and I tried to call Ixchel but I had no cell service. I turned my phone off and then back on to see if it would pick up any signal but after a couple of times, I realized I wasn't going to have any luck with that. I asked a woman carrying a toddler that passed by if she knew where this Center was located, but she didn't. She told me that if I went further up the street there's

a small area right before the main road splits in two that had sometimes had spotty cell reception. I followed her up there, even with a toddler she was outpacing me, at this point every step I took required leaning my entire body forward just to counter the sharp slope. After about 10 min of going up the street I saw a signal bar pop up on the screen of my phone, and I was finally able to call Ixchel. I went back down and I saw her waiting for me on the side of the road.

The center doesn't have any signage, from the outside, it just appears to be another house, after all, it is a center for undocumented migrants, so visibility is a valid concern. The organization rents out a space that was built on top of an already existing house, a sort of makeshift mezzanine of about 30 m² made up of steel purlin beams, reused discarded wooden slabs, and zinc sheets. A stairway made up of large concrete construction blocks with wooden slabs laid on top of the blocks lead up to the place where these women have their weekly meetings. The space consists of a main room and a smaller one that was probably designed to be a storage closet. In the back wall of the main room there's a water sink and a small counter space, the east-facing wall has two large uncovered windows, the opposite wall is covered with informational posters and flyers from the *Caja Costarricense del Seguro Social* (CCSS— the national public healthcare system) regarding issues of female reproductive rights and against domestic violence.

In the middle of the main room there are three squared tables that have bright red countertops and flimsy wooden legs and about a dozen stackable tancolored, plastic chairs. The floor is made up of wooden slabs that have large gaps between them, making it possible to glimpse into the living room of the house below it. The floors creak with every step, as does the roof; the exposed zinc metal sheets expand and contract with the sweltering heat of the sun. The room is filled with women and their children, there are 13 women and 17 of their children; the younger ones are playing on the floor with bright plastic blocks and foam letters and numbers. The older ones are running around downstairs playing with a soccer ball in the garage space. It smells of freshly brewed coffee. The humidity makes the heat almost unbearable and I can still feel the sweat running down my back. I stand in a corner for a couple of minutes and then I notice one of the women unstacking the chairs and trying to arrange them in a circle, I make myself useful and help her out. After 10 minutes of dispersed loud chatting between the women, Ixchel is finally able to get them to sit down and she begins by sharing the agenda for that week's meeting: they were going to discuss future implications for them and their families if Artículo 33 of the current National Migration Legislation (a monthly \$100 fine for each month anyone overstays in the country, this is discussed at length in Section 4.5) is passed.

WHAT THIS DISSERTATION SEEKS TO DO

This is the site of the organization that facilitated my access to the everyday life of undocumented Nicaraguan women. Most of the women that I engaged with in the past two years live in Calle Los Mangos or in the surrounding areas of where the Vinculos center is located. It was through these interactions that I was able use the undocumented experience to disclose how their their undocumented condition is generated and sustained by a number of sociotechnical systems that effectively displace the border from the edges of the nation-state to the body of the migrant. This dissertation aims to visualize through their experiences the processes, systems, and practices that are able to materialize the difference between a Nicaraguan and a Costa Rican.

These processes become visible when we consider how Yamil (Section 2.2) – an undocumented Nicaraguan – is not allowed to finish high school because he was unable to rectify his undocumentedness as a minor and when he turned 18 he became an undocumented adult that is accountable for his undocumentedness. The sociotechnical systems that produce undocumentedness also are visualized through the experience of Yessenia (Section 4.3) when she is forced to remain undocumented when her life becomes suspended in a bureaucratic limbo produced by the clash multiple incompatible sociotechnical systems. Or how María's (Section 4.3) employers reduce her to a body that only has value based on its labor capacity when they refused to insure her under the CCSS, a prerequisite for becoming documented. These processes of difference also become glaringly visible in the landscape of Calle Los Mangos (Section 4.5) a site shaped by state and local government neglect, a place that forces all of its inhabitants to multiple forms of social exclusion that are not entirely exclusive to undocumentedness.

Throughout this dissertation, I use these examples to argue that the sociotechnical ordering of modernity has fabricated differentiated human conditions (that entail differentiated possibilities of action) which are (re) produced by a multitude of sociotechnical systems that categorize individuals in an attempt to order populations. In particular, I pay attention to the sociotechnical systems that enable the possibility to categorize individuals into 'documented' and 'undocumented' migrants, and what possibilities of action are afforded in each sociopolitical category. I focus on how these systems are designed and how design is used to materialize and subsequently "naturalize" the condition of undocumentedness in Costa Rica.

Throughout this dissertation, I will also pay attention to the material conditions that sustain and perpetuate the undocumentedness as a sociopolitical condition: things, infrastructures, services, regimes of practices that make it difficult for

migrants to gain documentation required to establish a social contract with the state. These sociotechnical systems, things, infrastructures, services are introduced, in this thesis, as *bordering designs*: designs that materialize different logics of practice related to migrant management and population control within nation-states territories (Chapter 4).

What this dissertation aims to disclose is how these modern institutions of population control constitute an important part of the 'social-technical ordering' that has been foundational to organizing the project of modernity (Law, 1994) and as such, these systems are able to reproduce the colonial logic of difference that has made Nicaraguans undesired others.

Interrogating design's complicity in generating and naturalizing the undocumented condition, forces us to consider the inscription of state power in designed documents and proofs of verification that make up the documented condition. These documents are effectively material delegations of the nation-state border. This understanding forces us to pay attention to design's capabilities of rendering power intangible by dispersing and scattering the architecture of power throughout the processes and practices of everyday life. This scattering makes it possible to target the body, as it is the site of where everyday life is carried, in this sense, power is not seen, but it's felt when it's encountered.

The lack of material possibilities to provide proofs and forms of verification is what renders a person unverifiable. The lack of proofs and forms of verification justifies the rediction of the migrant from a verifiable human to an exploitable body. These documents and forms of verification are used to subject migrants to inhabit a condition of undocumentedness, a condition that extends from the body of the migrant into the environments in which they carry out everyday life processes necessary to sustain and reproduce life: processes that in Costa Rica are considered exclusive to the citizenry.

In this dissertation, I use everyday life experience of undocumented Nicaraguan women for two main reasons. The first one, is to generate specificity in the conceptualization of bordering designs. Although there are global border regimes that aim to set universal standards of migration management, bordering designs operate on a local level and respond to specific historical forces and state logics. These bordering designs must also be seen as culturally specific: in the case of Nicaraguan migrants, the bordering designs they experience in Costa Rica reproduce the colonial logic of otherness through institutionalized forms of exclusion and social exclusion. Additionally, the institutional processes by which the Costa Rican state reduces migrants to undocumented bodies are also determined by the structure, composition, and possibilities of the Costa Rican state.

The complex historical processes of nation-building in Costa Rica has produced a Costa Rican national identity in opposition to the Nicaraguans, who have been impossed a racialized identity. It is at the intersection between race and undocumentedness where the production of "illegality" is more effective (De Genova, 2013). Undocumentedness as a sociopolitical condition, is an instrumentalization of state power used to produce illegal and deportable bodies. Given that Costa Rica has limited resources and lacks infrastructure for deportation, the threat of physical removal from the territory is often replaced by the exclusion from the institutions of the welfare state and by social exclusion that materializes in spaces of urban segregation and marginalization such as Calle Los Mangos. For Nicaraguans, this production of "illegality" reduces them to cheap labor under precarious conditions with limited access to healthcare, childcare, housing, education, and exclusion from other state-funded or subsidized social programs.

The second main reason for using everyday life experience of undocumented Nicaraguan women is to disclose the relationship between bordering designs and the practices that emerge to counter these. Given that the concept of bordering designs used throughout this dissertation is essentially rooted on the ontological understanding of design (Willis, 2006; Fry, 2009; Escobar, 2018), it is possible to recognize design's political capabilities of generating differentiated possibilities of action in the world for migrants. These differentiated possibilities of action in turn generate other kinds of designs intended to resist and contest control; throughout this dissertation I refer to these as *contestation designs* (Chapter 5).

The experiences used throughout the dissertation allow us to uncover how practices at the micro-level—everyday forms of contestation—respond to the macro-level —structures of power. In this sense, this thesis situates design in the analysis of "power relations through the antagonism of strategies" (Foucault, 1982, p.780). These contestation designs materialize a tactical reversibility of power by undocumented migrants intended to contest state and state-delegated power in order to carry out the processes needed for the reproduction of life.

In this dissertation, I propose that looking at everyday life is critical to articulating how state power is delegated and how it shapes the material conditions in which undocumented migrants have to carry out everyday life processes. For these women, everyday life becomes a series of calculated actions that seek to resist and contest bordering designs that are intended to disallow the reproduction of life. Undocumented women are able to reconfigure the material conditions generated from state exclusion to materialize counter-practices, and in doing so, undocumented migrants are effectively designing for contestation. While bordering designs respond to logics of control, these designs are the product of other logics that emerge directly from state exclusion, such as the logic

of informality, the logic of contestation, the logic of invisibility, the logic of autonomy, among other contextually situated logics of practice.

Additionally, by situating this research in the everyday, this dissertation aims to recognize everyday life as an important site of experiential knowledge production. In accordance to feminist theory and practice, looking at everyday life allows us to pay attention to knowledge produced by alternate subjectivities— those other than the White, Male, Eurocentric knowledge—; that is the subjectivities of undocumented Nicaraguan women as racialized border-crossers. The contestation designs described in this dissertation are materializations of experiential knowledge generated by alternate subjects.

INITIAL PROVOCATIONS

One of the main drivers of this dissertation is to uncover 'design's political capabilities' (Domínguez Fogué & Rubio 2015), to shape worlds that entail differentiated possibilities of action for individuals that inhabit these worlds. These differentiated possibilities are produced by categories of difference and dualities that are rooted in colonial logic, which continues to be embedded and reproduced in the designs that make up these worlds. Throughout this dissertation, I intend to disclose how design has made it possible to exert, enact and materialize dualities such as citizen/migrant, un/documented, in/formal, and consider how design has made these dualities seemingly 'natural' and part of the human condition.

This dissertation is centered around the relationship between design and power. It looks at how power has relied on design and 'the artificial' to shape and materialize power relationships that generate differentiated human conditions. An exploration of this matter forces us to stem away from the somewhat dominant conceptualization of design: one that equates to style and is mostly concerned with the appearance of things and places, a reduction and trivialization of design shaped by economic and market-based interests. This leads us to consider, how we conceptualize design in order to interrogate designs' role in the materialization of power relationships?

Is there a conceptualization of design that allows us the possibility to consider the undocumented migrant condition as a *designed* condition? That is, a condition that is generated and sustained by design.

This dissertation aims to build an understanding of the border that goes beyond the static cartographic line that separates the territories of Nicaragua and Costa Rica, and seeks to understand the processes that separate a Costa Rican from a Nicaraguan. This is essentially what drives the concern behind the concept of bordering designs: is it possible to frame design as a material force that carries the state logic of sovereign power (once exclusive to nation-state borders) while shaping and conditioning everyday life processes?

A research of this nature — centered in the experience of undocumented Nicaraguan women — calls for a recognition of the limitations of design research. While design is rarely forced to reverse its gaze on itself, this means that instead of considering how can design solve this problem? it forces us to ask, how has design generated this problem? In the specific case of this dissertation, the question of how do migrants cope with the undocumented migrant condition?, is replaced by how has design contributed to creating and perpetuating the undocumented migrant condition?

These questions explicitly interrogate the politics of design, and whilst the political is often negated and undermined in design practices and research, I contend that an exploration using ethnographic methods, grounded in critical and reflective practice can acknowledge and problematize the political nature of design and how it has been complicit in establishing power relations that create the condition of undocumentedness (bordering designs) and how these women design ways around this condition (contestation designs).

If design is to shift its gaze away from the Western ways of being and knowing in order to consider alternate subjectivities, it is imperative to adopt other methodologies that allow for different epistemological and ontological articulations, other methods for knowledge production, and a careful reassessment of what counts as knowledge. More importantly, if design is to stake any claim in the work needed to transition the current state of the world to a better one, it needs to learn from methods that allow us to think about emancipation (de Souza Santos 2016) and *autonomía* (Escobar 2018).

In this dissertation, I propose using methods and theory from critical race theory, feminism, Latin American decolonial theory, postcolonial theory, indigenous theory, and fields of study that actively acknowledge and problematize the political nature of subjective knowledge production can provide grounding for recognizing contestation designs are sites of knowledge production that emerge from alternate subjectivities.

STRUCTURE OF THE DISSERTATION

In Chapter 1, I introduce some historical context needed to ground any understanding of the issue of migration from Nicaragua to Costa Rica. I briefly present some key historical events that have consolidated the Costa Rican national identity in relation to its neighboring countries. The processes that

produced a Costa Rican national identity simultaneously produced ideas of difference that have subsequently racialized Nicaraguans. This racialized identity is fundamental to problematizing the institutional and social exclusions experienced by undocumented Nicaraguan migrants in Costa Rica.

In Chapter 2, I introduce the definition of design I use to support the central arguments of this thesis. Based on the ontological grounding of design elaborated by Willis, 2006; Fry, 2009; Escobar, 2018; in combination with critical social theory I consider design as the selection, materialization, and configuration of logics of practice. A framing of design that is explicitly concerned with the ontological nature of design must consider "the artificial" as the context in which humans carry out their lives and therefore must consider design as a conditioning force over human lives. The artificial has created differentiated possibilities of action-in-the-world that effectively generate other human conditions. I contest that this conceptualization of design allows us to consider designs emerging from the logic of state power and designs emerging from the logic of contestation. Following that, I present a brief review of how design has been used as an effective device for scattering the architecture of state power. Finally, this chapter covers some theoretical considerations to position design as a force of contestation, that is design that emerges in response to state power.

In Chapter 3, I present a methodological exploration driven by the recognition of design research methods' own limitations. This chapter consists of a review of methodologies that emerge from critical theory and social research that strive to uncover and recognize human conditions that have been pushed to the margins, both in a social sense and an epistemological sense. Drawing from critical race, indigenous, feminism, decolonial methodologies I present a framework for conducting research in design intended to generate a different form of knowledge production from within the practice of design, using the experiences of subjects that historically fall out of design's domain.

The methodological review presented in Chapter 3, is centered around using everyday life as a site of experiential knowledge production from subaltern subjects, in this case gendered, racialized and undocumented subjects in a Central American context. It considers the Anglo-Eurocentric baggage of design practice and research and rethinks how to carry out research in a Central American context by exploring other ways and temporalities of engagement in order to conduct culturally-appropriate research in a site like Río Azul.

In Chapter 4, I introduce the concept of bordering designs through a theoretical framework based on design theory, political theory, critical border studies, decolonial, Latin American theory, and feminist theory. This framework is also informed by the experiences of undocumented Nicaraguan women that situates design in the practice of bordering. The framework of bordering designs

places design as a fundamental, but often overlooked, component that makes up systems that establish and legitimize conditions of un/documentation. Designed things, such as artifacts, technologies, systems, services, bureaucratic processes, regimes of practice, institutional structures, environments and public policies all have a role in the making of a migrant condition that entails differentiated possibilities of action in the world.

This chapter uses ethnographic research to evidence how these bordering designs or *dispositifs* (in Foucauldian terms) are not bound to the cartographic line used to designate the nation-state border, they are scattered along the processes that make up everyday life. It evidences how design has inscripted sovereign power to artifacts that make up the conditions of citizenship such as birth certificates, passports, visas, IDs, bureaucratic forms, education degrees, work permits, utility bills, etc. These all make technologies of population management that determine who gains and who is denied access to systems that reproduce life.

In Chapter 5, I introduce the concept of contestation designs: designs that are produced by counter-practices and interventions aimed to contest bordering designs. I present some findings from my interactions with undocumented migrants, that evidence how migrants are able to subvert and reconfigure bordering designs intended to manage and control their bodily presence and develop counter-practices in order to make up for state exclusion. My intent with this, is to recognize how these forms of contestation are not just defensive, but actively offensive as these counter practices seek to expand possibilities of action and agency for those who are excluded from the state. With this, I aim to show how state exclusion generates possibilities of action under other logics—such as the logic of informality, the logic of contestation, the logic of invisibility, the logic of autonomy. In engaging in these counter-practices, migrants are effectively designing for contestation.

In Chapter 6, I present some conclusions and final remarks drawn from the findings of this research. I also consider some contributions to knowledge and potential implications these findings have for the practice of design and design research. I also consider how this kind of research and methodological approach can be used in other fields of study that are socially oriented that based on materialistic approaches and analysis of social issues. I conclude with a final reflection of future directions and inquiries that emerge from this dissertation.

CHAPTER 1. THE NICARAGUA(N) — COSTA RICA(N) DIVIDE

1.1 A GLOBAL SYSTEM / LOCAL DESIGNS

We all inhabit a world-system that is shaped and based on the nation-state as the structural element that gives it order (Wallerstein, 2004). Entire bioregions, landmasses and even oceanic masses are traversed and fragmented by cartographic lines that delimitate and bound territories into nation-states. We could say that this is the human and human-made interventions claiming its stake and imposing order and structure over the world's surface. In geopolitical terms, the word is structured and organized by nation states, and these rely on borders to establish the limits of their sovereign power. Borders rely on design to materialize and exist in space, both in cartographic and physical space. Ranging from maps and GIS technology to the erection of walls, ditches, fences, and wires, border technologies have been designed to materialize and legitimize human-made spatial divisions necessary to establish different countries.

The world-order based on the nation-state is fairly recent considering the history of humans. This form of ordering the globe was foundational to modernity and its subsequent world hierarchization and categorization imposed by European colonization (Mignolo, 2012; Dussel, 1995). By claiming itself at the center of the world, Europe forced a world order that established coloniality as constitutive of modernity (Mignolo, 2012). Modernity reordered and rearranged the world and relied on the institution of borders in order to enforce and maintain that order. This is an issue of utmost importance for this dissertation, as Costa Rica(ns) and Nicaragua(ns) did not exist before the Spaniards arrived in the Americas. These countries, along with the rest of Central America and Latin America were created by the Spaniards and Portuguese as devices and technologies of territorial expansion and administration. The European 'invention of the Americas' (see O'Gorman, 1958; Quijano, 2000; Dussel, 1995; Mignolo 2005), imposed a new spatial reordering and fragmentation of space, exterminating entire populations of indigenous people and eradicating entire worlds and ways of being different from the hegemonic Eurocentric norm. Using Tony Fry's (2009) designerly terms, the colonization of the Americas can be seen as a process of "worlding" (modernity) while "deworlding" (non Euro-centric ways of being).

The global (b)ordering system that began with the constitution of the Americas not only gave us our modern nation-states, it also imposed other categories of difference that served the legitimization of Europe and European culture as the

center of the new world-order, this colonial legacy is still felt in the articulation of the "colonial matrix of power" (Quijano, 2000).

The logic of coloniality still operates in sustaining a world where borders have been erected to separate the world's wealth and poverty; borders that enforce the discourse between the Global North and Global South; the west and rest; the have and have-nots: dualities established during colonial times that are continuously reproduced today in the spatial arrangement of the world and in the domain of everyday life. In the context of this research, these colonial categories of difference are foundational to understanding issues of human mobility, what kinds of bodies have the right to move virtually unrestricted and what kinds of bodies face increased surveillance and restriction in their movements.

The narratives and discourses of the 1990s globalization brought the promise of creating a borderless world (Balibar, 2003; Kolossov & Scott, 2013; Paasi, 2012). What is now evident – 30 years later – is that it is possible to find two very distinct trends when it comes to borders: on one side, globalization has indeed created a borderless world for commodities, information, and goods (Appadurai, 1996); on the other, it has harshened migration policies and border control for humans. However, these migratory controls do not affect all humans equally, as these experience different possibilities of movement that are conditioned and dependent on individual and group characteristics. Many of these characteristics reflect categories of difference established by the logic of coloniality and the colonial matrix of power (Quijano, 2000).

The logic of coloniality is effective in conditioning who can move unrestrictedly in the world and who is bound to their place of birth. Populations around the world are organized in many ways. Human mobility seems to be one of the greater global designs. According to Abraham & van Schendel (2005) borders have the function of "dividing the world in two kinds of people, those who move and those who do not." (p.13). In this dissertation, I wish to make the argument that borders are most effective in dividing the world in two kinds of people, those who are allowed to move and those who are not allowed to move. This requires a look into the ways in which borders seem to be inexistent for some and how others experience a "multiplication and proliferation of borders" (Mezzandra & Neilson, 2013).

It is well known that citizens from different countries have differentiated possibilities of movement. On one side of the mobility spectrum, individuals from the Global North experience virtually unrestricted movement while individuals coming from the Global South have differentiated possibilities of movement depending on their country of birth. One of the ways we can make sense of this, is by looking back in history and exposing the ideologies that

supported European colonization around the globe. When these first 'explorers' set sail across the globe they did so in a manner in which they (White, Male, European) were subjects of intellect and rationality and used that to justify the submission of those who were perceived barbarian and irrational. They used European-superiority to claim the right of free movement and legitimize conquest and colonization.

Europeans and citizens from the Global North are still granted the possibility of relative freedom in their movement as a form of a 'geopolitical birthright'. The rest of the world, those who inhabit the Global South, are subjected to institutional and international processes of categorization that determine possibilities and restrictions over their movement. Categories such as visa holders, refugees, asylum seekers, migrant workers are based on colonial hierarchies that condition who was the right to move. These designations are part of migration management systems and regimes that restrict or allow movements of bodies.

These management systems become particularly evident in their materializations in sites where migrants try to cross the Global North-South divide, sites such as the US southern border, and the Syran refugee "crisis" across European continent. Less visible are the sites where the Global North-South logic is used to manage migration in the context of South-to-South migratory flows. The research featured in this dissertation is situated precisely in this context. It is an attempt to articulate how in Costa Rica, the colonial logic has informed migration management systems that produce differentiated forms of inclusion for migrants depending on categories of difference established since colonial times. Through this research, I seek to uncover some of the ways design has been instrumental to the materialization of the 'discriminatory function of borders' (Balibar, 2003) based on colonial categories of difference that create the Costa Rica(n)-Nicaragua(n) distinction.

In Latin American countries, the intersection between race and national identity is impossible to disentangle. The idea and subsequent materialization of race was instrumental to the colonization of the Americas. As European colonization reshaped the American continent into nations, distinct racial ideologies were produced in parallel to national ideologies. After these nations gained independence from the European colonial centers, these identities and ideologies echoed into the processes of nation-building led by Latin American intellectuals and political leaders, who instead of contesting European arguments of racial inferiority "embraced white supremacy and worked to facilitate and justify a system of pervasive race and colour stratification whereby darker-skinned people, typically with more notable indigenous and African features, occupy the lower rungs of the racial ladder, and those of primarily European descent are at the top." (Golash-Boza & Bonilla-Silva, 2013, p.1486)

1.2 CODED DIFFERENCE: The Costa Rican National Identity

This brief review intends to introduce some of the the historical processes, ideas, and discourses that consolidated the Costa Rican national identity, which generated ideas of difference that are used to justify and perpetuate institutional and social exclusion of undocumented migrants. In order to make sense of the current conditions Nicaraguans face in Costa Rica, the historical and relational process of the Costa Rican identity as part of the nation-building project is key to understanding why Nicaraguans have become a racialized group and how race has been used to legitimize and sustain systemic and structural discrimination against this population.

Throughout Latin America, projects of nation-building that originated with processes of independence from Spain in the 19th century were sustained on ideas of colonial logic of difference and hierarchization that allowed and legitimized a male, white-European minority to rule over a heterogeneous majority population (Gonzaléz Stephan, 1998). The historical processes that consolidated the concept of citizenship as a foundational for the projects of modern Latin American nation-states has a profound relationship to the invention of otherness (Castro-Gómez, 2000). This makes it impossible to understand the projects of Latin American nation-states without this intertwining of race and nation. The logic that allowed categorizations of difference during colonial times in Costa Rica has endured and evolved allowing for new ideas of "whiteness" in response to the influx of Nicaraguan migrants (Goldade, 2008). As Sandoval (2004) has argued, "the current process of racism of Nicaraguans [in Costa Rica] is not a simple consequence of 'immigration,' as the media has often argued, but a process closely related to the ways in which nation and race have been interlinked in Costa Rica" (p. 63).

The work of Costa Rican historian Patricia Alvarenga (2007) reveals how during the 19th century the Costa Rican state developed an institutionalized practice—based on migration policies— that categorized populations of migrants according to desirability. Due to a scarce population in the country at the time, there was a significant labor shortage, which led to the design of policies intended to attract migrant labor. At first these policies targeted mostly Anglo-Europeans and Spanish migrants. It was believed that Spaniards were able to blend in to the presumed homogenous population of the Central Valley—where the urban and economic centers of the country were established, and where even today more than half of the population resides, and in the context of this dissertation, it is where I conducted my research.

At the time, coffee was Costa Rica's most important product and its production

was based in the Central Valley and surrounding mountainous areas. In 1820, Costa Rica became the first Central American country to export coffee to Europe, an event that was used to reinforce the idea of Costa Rican "exceptionalism" by the Central Valley coffee oligarchy (Sandoval, 2004).

During this period the same policies intended to bring European migrants to work in the coffee production, distributed racialized migrants, black, asian and those considered mestizo such as Nicaraguans and other Central Americans outside of the Central Valley to perform agriculture work mostly in banana plantations. This can be seen as a reproduction of the racially segmented labor division that was developed across Latin America by the Spanish during colonial times. These migration policies and the subsequent territorial distribution of migrants based on race, became part of the national identity project of the late 19th century and provides evidence of how much racism was embedded in processes of building a cohesive national identity based on racial and class homogeneity (Palmer, 2003).

Costa Rican "exceptionalism", which is still currently a dominant discourse tied to the Costa Rican identity, is the result of an extremely complex historical identity production that materializes in political discourses that equate Costa Rican society as uniquely egalitarian, democratic, peaceful, and homogenous (implying white) in relation to the rest of the Latin and Central American countries (Goldade, 2008; Sandoval, 2004). There are certain aspects of the invention of Costa Rican "exceptionalism" that are important to consider how Costa Ricans were able to produce a racialized identity tied to Nicaraguans and how race is still used as a technology for binary codification that legitimizes and sustains the production of "illegal" Nicaraguan migrants.

The idea of Costa Rican "exceptionalism" was first introduced by European travelers that visited the Central American region and noticed and praised Costa Rican society as they percieved it to be peaceful and white, noted in the following observation from the English writer and journalist Frederick Boyle:

"Of the great and growing prosperity of the country there can be not a question at all I believe there is a cause for the tranquillity of this country other than mere prosperity — that is purity of population. Not in manners or morals — but in blood." (Frederick Boyle, 1868, p. 218, quoted by Christian, 2013, p.1600)

This relationship between "blood purity" (which necessarily implies whiteness, as the reference to pure suggests European descent) and peacefulness, has been foundational to the project of building a Costa Rican national identity and resonates in the country's current national imaginaries and identity. In regards to Costa Rican "exceptionalism", the exceptional is to be understood in relational

terms, built in opposition to the other countries of the region. Therefore, a project that resulted in the idea that Costa Rican society is homogenous, egalitarian, and peaceful was and continues to be framed in opposition to its Central American neighbors who are often portrayed as undemocratic, violent, and darker-skinned. This characterization is what drives most racist discourses targeted against Nicaraguan migrants, who make up the largest foreign-born population in Costa Rica. As a result of these historical processes, Nicaraguans have become a racialized identity. As such, Nicaraguan migrants are ascribed values that counter those attributed to the Costa Rican identity sustained on the idea of exceptionalism.

The designation of La Suiza Centroamericana (The Central American Switzerland) to Costa Rica, although rooted in colonial times is currently used as an analogy that considers the country "a mountainous, idyllic, peaceful, unique, and isolated country, and by extension, Costa Ricans as peaceful, exceptional, and "white"" (Goldade, 2008, p.86). The idea of this "whiteness" first originated from false claims that date back to colonial times that were supported by the belief that given its geographic isolation from large indigenous centers, there wasn't a large indigenous population living in the territory when the Spaniards first arrived to the continent. By now, this idea has been disproven as more recent studies estimate that there were around 400,000 indigenous people living in the territory at that time the Spaniards first arrived (Palmer & Molina, 2004). But this claim has served as the basis for the production of a myth of racial purity that has been reproduced to this day (Gudmundson, 1986). Costa Ricans are believed to be white in relation to its neighboring countries that had a larger population of indigenous and therefore more extensive processes of mestizaje resulting in the "darker" skins of Nicaraguans and other Central Americans. Therefore, establishing 'Nica' as a racialized identity.

Nicaraguan migrants in Costa Rica are not only the target of racists discourses, they are constantly framed as responsible for the increase of crime in the country. This is also a product of the historical nation-building process. The idea that Costa Ricans were a peaceful population originated as well in the 19th century when Costa Rica signed a number of neutrality agreements, but the current idea of a 'peaceful nation' was consolidated when the national army was dismantled and eliminated permanently in 1948. This move was critical in reinforcing Costa Rican identity as exceptionally peaceful and it also reconfigured the entire state structure by allocating funding that was intended for the military defense to establishing and consolidating a robust welfare state.

The country's ideas of "exceptionalism" was further exacerbated during the 1980s, when most of the Central American region was undergoing brutal armed conflicts as proxy wars between the U.S. and Russia during The Cold War. Costa Rica was situated in the middle of Nicaragua's decade-long civil war and

Manuel Noriega's military dictatorship in Panama. The Costa Rican president at the time, Oscar Arias, led the Central American peace negotiations in the late 1980s, earning him a Nobel Peace Prize and internationally consolidating Costa Rica as a democratic and peaceful nation in a region ravaged by wars and dictatorships.

When Nicaraguans first started fleeing the war and arriving to Costa Rica in the 1980s, negative feelings against migrants emerged as they were perceived to be violent and their presence was "antithetical to core ideals of Costa Rican national identity including democracy, peace, and egalitarianism" (Goldade, 2008, p. 94). These negative feelings were partly based on the fact that Contras were using Costa Rican soil as refuge and were easily crossing into the country through the porous border. This led to the unfounded fear that violent Contras trained by the U.S. military forces were impersonating Nicaraguan migrants to infiltrate Costa Rican society. There was also a sentiment of fear that Sandinistas would retaliate against Costa Rica since it was aiding U.S.-backed Contras, by letting the U.S. use the national territory for logistic operations and delivering weapons and supplies. The characterization of Nicaraguans as violent due to their U.S. military training and training from the Sandinista army still lingers in the national imaginary of Costa Ricans and materializes in current xenophobic discourses that consider Nicaraguans the source of crime and most social problems experienced in Costa Rica (Sandoval, 2004).

The same project of nation-building that produced a Costa Rican identity based on values such as egalitarianism, democracy, peacefulness and whiteness; rendered Nicaraguans as unequal, undemocratic, violent and most notably darker-skinned. This evidences how racism has been used to establish a Costa Rican national identity in opposition to Nicaraguans. "(...) since independence from Spain in 1821, there have been long-term disputes and conflicts associated with the definition of the borders between the two states. Nationalistic discourses have turned such borders into racialized boundaries. Hence, Nicaraguans have long been considered both internal and external others." (Sandoval, 2004). Therefore the Costa Rica-Nicaragua border acquires the racial discourse of difference and—as will be explored in this theses—this racial discourse is materialized in the design of mechanisms of institutional and social access used by the Costa Rican state to "preserve" the integrity of the country by excluding the undesirable Nicaraguan other.

1.3 VAMOS AL SUR: SOUTH TO SOUTH MIGRATION

"The large and uncontrolled increase in the immigrant population in recent years ... threatens to generate negative pressure on variables such as urban space, employment, the quality and coverage of social services, the rational use of



renewable resources, security, etc."

—Laura Chinchilla, Former President of Costa Rica (2004)

The dominant political discourses on migration, specifically those that frame migration as a crisis, have an undeniable Northern, colonial agenda. Migration is often understood through a Northern gaze and its conceptualization is grounded on the North-South divide that justifies framing migration as a crisis. Migratory flows from North-to-South are often talked about using other framing, terms like 'immigrants' are replaced by 'expats'; economic motivations are replaced by cultural exchange; and, issues of mobility are granted as a birthright and not reliant on international protection agreements.

In accordance with the geopolitics of knowledge production, most of the scholarship about migration is focused on South-to-North flows; although, almost half of the global migrants move between countries in the Global South (UNDP, 2007). This particular research is situated in the context of a South-to-South migratory experience. However, what this dissertation intends to expose is that the Nicaraguan-Costa Rican migration, although located in the Global South, is managed under the South-to-North logics. This responds to a number of reasons; in first instance it reflects the colonial logic of categorizing difference between Costa Rica(ns) and Nicaragua(ns) and secondly, it derives from the compliance to international border regimes that are based on migration management technologies developed in the North and standardized across the globe.

Throughout this dissertation, I will consider how migration management policies and their materializations reproduce the colonial difference between Costa Rica(ns) and Nicaragua(ns). A colonial difference that has been materialized in different political discourses since the 19th century with the early projects of national building in Central America. These political discourses, throughout history have shaped political decisions that materialize in the infrastructure and design of state institutions, policy, legislation, and the sociotechnical systems that make up the current Costa Rican State. These are the material infrastructures that mediate the relationship between migrants and the state, and given that these have been shaped in the past by colonial logic, this logic echoes in present day power relationships between Nicaraguans and the Costa Rica State. In order to understand how this colonial logic is being reproduced in present day I will look at the experience of undocumented Nicaraguan women currently living in Costa Rica.

During the two years of field research conducted for this dissertation, I encountered Nicaraguan women and children that had migrated to Costa Rica as part of a historical migratory trend between the two countries. Nicaraguan

migration to Costa Rica is not a recent occurrence, in fact it dates back to colonial times when the two countries were first established (Alvarenga, 1997; Morales Gamboa, 1999; Olivares Ferreto, 2007). However, I will not provide a comprehensive review of the history of migration between the countries, for the purpose of my argument, I will only consider more recent history dating back 40 years.

The first big wave of Nicaraguan migration to Costa Rica happened during the 1980s. In 1979 the National Liberation Front of Sandino (FSLN, Frente Sandinista de Liberación Nacional) overthrew Anastasio Somoza's government starting a decade-long civil war between the Sandinistas and the U.S.-backed guerrilla counter-offensive known as the Contras. During this time there was a massive influx of both economically-motivated migrants and political-migrants fleeing conflict. While Nicaragua was enduring civil war, Costa Rica was experiencing an increasing amount of outward migration to the U.S. facilitated by the relationship between the U.S. and Costa Rica during the Nicaraguan war—Costa Rica's support was critical for the U.S. and provided refuge for the Contras along the border in addition to lending airstrip space for delivering weapons and supplies, among other more obscure political favors. This outward migration to the U.S. generated labor gaps in the country, particularly in the agriculture and construction sector. These gaps were conveniently filled by incoming Nicaraguan migrant labor. At the same time, gendered, domestic labor was also needed since shifts in gender relations led to the incorporation of more Costa Rican women to the professional workforce.

In the 1990s, after the *Sandinistas* were voted out of power, the motivations for migrating for Nicaraguans were mostly economical and responded to the country's economic hardship produced by the U.S.-led embargo instated back in the 1980s when the *Sandinistas* defeated the U.S.-backed *Contras* and took over political control of the country. During this time of economic distress, the amount of Nicaraguan migrants that moved to Costa Rica increased threefold. Unlike the migration trends from the rest of the Central American countries (Guatemala, El Salvador, Honduras), by the mid-1990s Costa Rica had surpassed the U.S. as the primary destination for Nicaraguan migrants (Brenes 1999; Funkhouser, 1999).

In 1998, Hurricane Mitch left unprecedented destruction throughout the Nicaraguan territory and forcefully displaced thousands of Nicaraguans internally and many of them decided to move further to Costa Rican territory, becoming a kind of environmental migrants—although it must be noted that there is no legal or institutional recognition of this designation. In 1999, as a direct consequence of the massive displacement produced by Hurricane Mitch, the Costa Rican president at the time, Miguel Ángel Rodríguez, instituted a policy for migratory amnesty that allowed up to 200,000 Nicaraguans to apply

for legal residency in the country.

It is not possible to know for sure how many Nicaraguans currently reside in Costa Rica, since a significant proportion of these are undocumented and unaccounted. According to the last national census conducted in 2011, there were a total of 355,899 foreign born individuals living in Costa Rica, which amounted to 9% of the country's total population. Of those, 287,766 were Nicaraguans, about 75% of all foreign born living in the country (INEC, 2011; Vargas Aguilar, 2004). More current estimations consider that up to 10.5% of Costa Rica's total population are born in a foreign country, Nicaraguans making up the majority of those, making Costa Rica the Latin American country with the highest percentage of migrants in the region.

More recently, in April of 2018, a state of political unrest returned to Nicaragua as massive protests emerged against the proposed social reforms by current president Daniel Ortega. This is an ongoing conflict that has not yet been resolved and that has left over 300 casualties, many of them students, and has paralyzed the country's economy. Due to this situation, in the past 2 years there has been a significant inflow of politically and economically motivated Nicaraguan migrants into the Costa Rican territory. As of August of 2019, Costa Rica had received over 68,000 asylum requests (UNHCR), and by December of 2019, only 383 had been approved (according to Daguer Hernández, Deputy Director of *Dirección General de Migración y Extranjería* (DGME)). According to data provided by DGME in 2018 only 6% of all asylum claims presented in Costa Rica were granted refugee status and assessment was based on the individual's ability to provide evidence of being in a condition that required international protection.

1.4 THE RIGHT TO HAVE RIGHTS

The low number of Nicaraguans that live in Costa Rica under refugee status or other migratory status based on international protection agreements, evidences the limitations of international protection mechanisms. These mechanisms were not designed considering economic migrations or political motivations that fall outside of the established by The United Nations 1951 Refugee Convention and the 1967 Protocol.

These two instruments of international protection were originally modeled after the Jewish population who were displaced throughout Europe during WWII. This sets the precedent and basis for asylum claims and refugee status as fleeing persecution on account of race, religion, nationality, membership of a particular social group, or political opinion. Economic migrants, understood as migrants fleeing poverty and hunger — although, conditions equally or more

life threatening — are not considered eligible for refugee status. The definition of a refugee was not designed to consider economic migrant populations such as Nicaraguans, and while some Nicaraguan migrants are eligible for refugee status based on claims of political persecution, the process for applying is disjointed and complex. Therefore, even with viable claims for protection, unless an individual can successfully materialize proof and verification of their claims, protection is not granted.

The systematic failure of these international protection mechanisms is highly problematic because these are not just failing to consider individuals that have protection claims that fall outside of the UN-normative model. In failing to protect these individuals, migrants are being rendered undocumented and therefore their presence is considered 'illegal' in the country. These mechanisms of protection are complicit in the production of illegality that is foundational to current economic and production systems that rely on cheap, exploitable labor.

"Indeed, the criteria for granting asylum tend to be so stringent, so completely predicated upon suspicion, that it is perfectly reasonable to contend that what asylum regimes really produce is a mass of purportedly 'bogus' asylum seekers. Hence, in systematic and predictable ways, asylum regimes disproportionately disqualify asylum seekers, and convert them into 'illegal' and deportable 'migrants'." (De Genova, 2013, p.1181)

Current international protection protocols and the different legal categories derived that consider a variety of migrants, for the most part, are not intended to protect or grant rights to economic and low-skilled, poor, labor migrants. Thus, the relationship between Nicaraguans and the Costa Rican state cannot be mediated by international migration and protection agreements. This leaves most Nicaraguan migrants responsible for establishing their own relationship with the Costa Rican state, regardless of needing forms of state protection. With no institutional framework or mechanism that considers economic motivations a claim to move, low-skilled, poor economic migrants that are undocumented have only their human condition to fall back on.

This reveals an important paradox in the institution of human rights in relation to migrants. There are significant limitations to which the institution of Human Rights is able to protect individuals solely based on their human-quality. As a result of being stateless after being striped away of her German citizenship on account of being Jewish, Arendt's analysis of the condition of statelessness exposes the contradictory nature between the logic of 'universal and inalienable' that's applied to human rights with the logic of 'national and territorial sovereignty':

"The Rights of Man, after all, had been defined as "inalienable" because they were supposed to be independent of all governments; but it turned out that the moment human beings lacked their own government and had to fall back upon their minimum rights, no authority was left to protect them and no institution was willing to guarantee them" (Arendt, 1973, p. 83)

Arendt's claim derives from her own lived experience, and points to the fact that in order to have rights, an individual must be more than a human being, they must be recognized as members of a political community. In the first instance, it is through citizenship of a nation-state that individuals are allowed "the right to have rights" (Arendt, 1973).

The historic indeterminacy of the category of citizen — since the establishment of the figure of the citizen —, is what has allowed "the possibility for any given realization of the citizen to be placed in question and destroyed by a struggle for equality and thus for civil rights." (Balibar, 2017, p.37). It is this indeterminate nature of the citizen that has been used, throughout history, to include and to justify the suspension of rights and participation for minority groups.

For migrants, especially undocumented, their condition derives from an oppositional relationship from the figure of the citizen. The 'undocumented' reside in a country under a condition that removes functioning citizenship. Those living without functioning citizenship or not belonging to any nation-state (such as stateless people) are rendered to a condition of "human and nothing but human" (Arendt, 1973). This points to the paradoxical nature of Human Rights previously referred to: although Human Rights seem intrinsic to the human condition, it is nation-state belonging that ensures the concrete realization of these "abstract" rights. The condition of undocumentedness, therefore becomes a technology used to legitimize the suspension of human rights by the state.

During the second half of the 20th century, a transversal system of institutions was established with the aim of preventing an event such as the Nazi extermination of Jewish population from recurring. The United Nations and its 1948 Declaration of Universal Human Rights were established to protect religious and ethnic minorities from abuses of sovereign power. From what we can see today, with the case of Palestinians, the Rohingya people, and many other asylum seeking and stateless populations around the world, is that these institutions are insufficient as in practice they do not transcend the governmental and state structure that ensures basic human rights. Proving how although human rights are detached from the logic of nation states, in practice the insurance of human rights fall within the nation-state structures and institutions.

The point I want to make with this is that the idea of the "human" that has the right to have human rights is a sociopolitical construct. Whoever falls into the category of human is the result of many political decisions that have been informed by centuries of colonial logic. These political decisions have materialized in the design of state institutions, policy, legislation, and the sociotechnical systems that allow for the reproduction of life in a dignified manner. In Costa Rica, years of political decisions informed by colonial logic, based on ideologies of difference and hierarchy, have materialized in processes and systems that render Nicaraguans less-than-human.

Design has not only been used to shape these processes and systems, it has effectively been able to "naturalize" these ideas of difference and hierarchy. It is through the persuasive capability of design and its role in shaping the "project of modernity" (Fry, 2015) that these categories of difference have been assumed as natural within the discourses of modernity. Designed things are able to enact upon this difference by generating differentiated possibilities of action for individuals that are sorted based on these categories of difference.

CHAPTER 2. THE MIGRANT CONDITION IS A DESIGNED CONDITION

Situating design as a political act, one that creates difference, generates possibilities of action, conditions social relations, imposes certain ways of living, and molds every aspect of everyday life, is one of the main concerns of this dissertation. In particular, this dissertation seeks to ask how has design contributed in creating and perpetuating possibilities of action for undocumented migrants and what practices result from inhabiting this condition?

In this chapter I will present a review of some theoretical positions and arguments centered on the ontological¹ character of design in order to build an understanding of design that is able to support the claim that the migrant condition can be considered a *designed* condition. In this case, the use of the term *designed* has a dual purpose: on one hand it allows us to start identifying the series of calculated interventions from the state that generate and naturalize the idea of an undocumented migrant; while it also allows us to start understanding the series of calculated interventions from migrants, which emerge from inhabiting the condition of undocumentedness.

In the following chapter, I will begin by introducing the definition of design I intend to use to support the central arguments of this thesis. I will then consider how issues of materiality are necessary in understanding the human condition and how "the artificial [as] the context of our lives" (Dilnot, 2009) has created differentiated possibilities of action-in-the-world that effectively generates other human conditions. Following that, I will present a brief review of how design has been used as an effective device for the scattering of the architecture of state power. Finally, this section covers some theoretical considerations to

¹ The ontological grounding of design used throughout this dissertation derives from Anne-Marie Willis (2005) "Ontological designing". Willis' characterization of ontological design is centered on the relational between humans and the world. She considers design to be fundamental to being human—"we design, that is to say, we deliberate, plan and scheme in ways which prefigure our actions and makings— in turn we are designed by our designing and by that which we have designed (i.e., through our interactions with the structural and material specificities of our environments)", she considers that design consists mainly on a double movement: "we design or world, while our world acts back on us and designs us". (p. 70). This ontological positioning of design provokes us to think about how design shapes the world and how the world shapes us in return. But this shaping of the world carries specific political programs to it.

Authors such as Kalantidou and Fry (2014) highlight the politics of ontological design: "Designing, and being ontologically designed by the experience of 'being in place(s)' over time, is always a condition of political emersion. The world of human fabrication that constitutes topos [place] is always political, in that the making of a world is always for and thus serves, someone." (Kalantidou and Fry 2014, p.6).

position design as well as a force of contestation, that is design that emerges in response to state power.

Throughout this chapter, I will draw from theory generated in design studies as well as the social sciences and humanities. I consider that using a design-lens to frame issues of migration and the human condition allows us the possibility of interrogating design's complicity in generating, sustaining, and perpetuating material conditions experienced by marginal and subaltern groups. In this particular case, I intend to use this framing to uncover how Nicaraguan women are rendered "illegal" by the Costa Rican state and how they are conditioned to reproduce their everyday lives on the premise of state exclusion.

2.1 DESIGN: SELECTION, MATERIALIZATION, AND CONFIGURATION OF LOGICS

The exploration of the relation between power and design presented in this dissertation deviates from the current dominant design discourse, which is usually framed in terms of the transformational "power of design", often condensed in the *how might we solve a certain problem?* prompts. These *how might we* prompts are often the sole drivers of vast bodies of design practice that apply the logic that design is exclusively a solution-oriented practice. This is a legacy that stems all the way back in design history and is epitomized in Herbert Simon's (1996) widespread definition of design as "courses of action aimed at changing existing conditions, into preferred ones".

When this idea of design is applied to socially-engaged and socially-oriented design — which is the case with a lot of the current design for social innovation practice, — the complexity and multidimensional nature of social problems renders this definition of design as overly simplistic. When we consider design as a plan of actions intended to transform something into a desired other thing, this definition mostly considers the perspective of *who designs* (usually a designer), and not those *who are designed* (the users, in a traditional sense, but really anyone who enconters and relates to the designed thing). The framing of design I wish to present in this dissertation, and that I'll use throughout to sustain my arguments, is one that does not consider the figure of who designs, but the *logic* that drives many diffused designs in steering towards these "preferred" conditions.

Using a grounding of design that shifts from the figure of the designer to a logic of practice as the main driver of the process of design allows us to consider several things that conventional ideas of design fail or refuse to acknowledge. First, it lets us question the idea behind "preferred" conditions; who or what determines what falls into preferred conditions? Instead of focusing on the

designer as the sole agent who establishes what makes up a "preferred" condition, I suggest that positioning logics of practice as the driving force behind design reveals more clearly the historical forces and politics that underlie and shape these "preferred" conditions. A logic-driven understanding of design also allows is to consider how there can be multiple politics at once conditioning design. And so, throughout this dissertation, design will be understood as the selection, materialization, and configuration of logics.

The use of logic in this sense must be grounded in the idea of logics of practice derived from Bourdieu's concept of habitus. For Bourdieu, habitus is a complex social process by which individuals are able to transfer into practices internalized behaviors, perceptions, values, and beliefs. Through these practices, individuals are able to transfer, act upon and materialize their positions —which are often the result of both collective and individual dispositions and configurations—, the practices in itself are able to justify individuals' perspectives.

"This practical logic—practical in both senses— is able to organize all thoughts, perceptions and actions by means of a few generative principles, which are closely interrelated and constitute a practically integrated whole, only because its whole economy, based on the principle of the economy of logic, presupposes a sacrifice of rigour for the sake of simplicity and generality and because it finds in 'polythesis' the conditions required for successful use of polysemy." (Bourdieu 1990, p.86)

For Bourdieu, and in the context of my argument, attention to habitus in its relation to practices is of great importance given that habitus can be seen as a force of continuity and tradition — what I refer to as forms of reproduction of colonial logical in bordering designs in Chapter 4— as it can also be regarded as a force of change — counter-practices that make up contestation designs in Chapter 5.

Following Bourdieu, other authors such as Bennett & Joyce (2010) use the term logics of practice as part of diverse materialist analyses of power:

"the term logic of practice one is not imputing an innate, somehow immanent, force and direction to either capitalism or the state, a 'state logic' for instance. Instead, the history of both, and of other 'historical forces' (such as technology itself) that have been reified in similar fashion needs to be taken apart and if necessary rewritten in terms of detailed reconstructions of what can be said to have formed such 'logics'" (p. 9).

This idea of design based on the materialization of logics, grounded on an

ontological understanding of design, allows us to consider how design can generate non-preferred conditions for those who fall within the designed—but had no agency in the design itself. This is, in fact, one of the main issues this dissertation aims to uncover. There is a growing need to consider a grounding of design that is not solely centered around the transformative power of design, but one that considers as well the unintended and intended consequences that can be quite destructive for certain worlds and ways of living. With this I intend to use a design lens to uncover a social problem with the intent of considering and disclosing "the vexing question of the relation between design and the making of deeply unequal, insensitive, and destructive social orders [which] seems to remain design's own "wicked problem" (Escobar, 2018, p. 47). In this sense, this research does not seek to uncover the power of design, but instead turns its attention to the ontological relation between power and design, the ways power dynamics materialize by design and how design (re)enforces power dynamics, put simply, it is an exploration of how power is designed.

The issues this dissertation seeks to uncover and expose have often been asked in the social sciences and humanities, but design rarely faces these kinds of questions. The material turn in the social sciences and in cultural studies (Coole & Frost, 2010; Bennett & Joyce, 2010; Miller, 2005) opened possibilities of understanding the role of material infrastructures in the constitution and exercise of state power. Issues of agency—understood as networks of relations between human and non-human actors— have become fundamental to understanding the composition of 'the social' (Bennett & Joyce, 2010; Bennett, 2010; Haraway, 2004). This research is centered in articulating the relation between humans and the artificial in order to start considering how different human 'categories' are enacted by orders of the artificial and how these 'categories' generate particular ways of relating to the world. In this sense, it seeks to expose how "[t]here can be no fundamental separation between humanity and materiality – that everything that we are and do arises out of the reflection upon ourselves given by the mirror image of the process by which we create and form and are created by this same process." (Miller, 2005, p.8).

The intent of this dissertation is to open design to questions related to design and power, questions that are usually asked from within the humanities and social sciences, which, through materialist approaches consider matter and the artificial but still lack the perspective from within design (with some notable exceptions, in design see Dilnot 2015; Keshavarz, 2016; DiSalvo, 2012; Domínguez Rubio and Fogué, 2015; Ansari, 2019; Easterling, 2005, 2016). Throughout this dissertation, I will not explicitly make the case for distinguishing between design, architecture, and policy, instead, I will proceed to look at the intersection of all these practices in creating and shaping the world in which we inhabit, that is, all these fields have taken part in the shaping of the artificial, the human-structured world. The understanding of design that I have just presented is one

that allows us to consider the migrant condition as a condition of the artificial: a condition that is not natural, but has been naturalized within the material possibilities of the artificial; a condition that is justified and legitimized by categories of difference that have been materialized by design. These materializations are found in 'technologies of division' (Mezzandra, 2013): along nation-state borders, in bordering systems, and making up borderscapes.

In the specific context of this research, these categories of difference allow certain individuals to have the possibility of unrestricted movement, while others face severe impositions that intend to regulate and control theirs. For which the understanding of design used throughout this dissertation must be able to encompass not only practices coming from state and non-state actors to control and regulate human movement, but must also include marginal practices that emerge from either the subjection or the contestation of this control. If we start considering design to be a means by which categories of difference are legitimized and/while contested, we can consider design as the means by which certain logics of practice become enacted and naturalized through their materiality. This allows us to consider designs that derive from the logic of state power and migrant control, while also considering designs that emerge from the logic of contestation.

Conceptualizing design as a process of materializing logics of practice opens the possibility to consider through the perspective of design the articulation of humans, material things, and process that assemble or make up the state, in the case of 'state logic', and the same can be said of the logic of contestation. However, 'state logic' must not be understood as a single fixed logic, the Costa Rican state logic is made up by a multitude of logics and forms: in it, is embedded the colonial logic, the welfare logic, bio-political logic. And in the same sense, the political capacities of design are able to "articulate and generate different political logics and forms." (Dominguez Fogue & Rubio 2015, p.19)

In order to examine the ways in which design has been complicit in creating and sustaining differentiated possibilities of action based on migratory status, it is necessary to understand relations between people, things, infrastructure, economies, and policies that generate seemingly unquestionable or inevitable categories of difference. What I will elaborate in more detail in Chapters 4 & 5 is how while these relations make up categories of difference, these, in turn, generate and produce differentiated possibilities of being and action based on other other logics. For example, undocumented migrants while experiencing state exclusion are conditioned to operate and contest exclusion based on other logics, such as the logic of informality, (in)visibility, autonomy, and contestation.

2.2 DESIGNING (OTHER) HUMAN CONDITIONS

A focus that privileges logics as design's driving force allows us to consider a multiplicity of systems, practices, interventions, situations, and environments that would normally fall out of the traditional design definitions and how these generate or negate possibilities of action-in-the-world. Using this design conceptualization makes it possible to start uncovering a heterogeneity of material forces that have a role in generating the human condition. The ontological turn in social sciences and in design closely examines relations between material configurations of the built environment and the human condition. An understanding of the human condition that fails to consider the relation between humans and the material world fails to consider how 'the artificial'— understood as the human-structured world—, has become the setting and context of human-activity and everyday practices. Hannah Arendt's (1958) phenomenological analysis of the human condition clearly exposes the ontological concern of considering relations between humans and the material world:

"The human condition comprehends more than the conditions under which life has been given to man. Men are conditioned beings because everything they come in contact which turns immediately into a condition of their existence. The world in which the vita activa spends itself consists of things produced by human activities; but the things that owe their existence exclusively to men nevertheless constantly condition their human makers. In addition to the conditions under which life is given to man on earth, and partly out of them, men constantly create their own, self-made conditions, which their human origin and their variability notwithstanding, possess the same conditioning power as natural things. Whatever touches or enters into a sustained relationship with human life immediately assumes the character of a condition of human existence. This is why men, no matter what they do, are always conditioned beings. Whatever enters the human world of its own accord or is drawn into it by human effort becomes part of the human condition. The impact of the world's reality upon human existence is felt and received as a conditioning force. The objectivity of the world—its object- or thing-character—and the human condition supplement each other; because human existence is conditioned existence, it would be impossible without things, and things would be a heap of unrelated articles, a non-world, if they were not the conditions of human existence." (Arendt, [1958] 1998, pp.104-105)

What Arendt's description of the human condition exposes is how the interactions we have with the material world become conditioning forces of how

we understand and act in the world, applied to design, it is what Anne Marie Willis (2006) refers to as "design designs", "we design our world, while our world acts back on us and designs us" (p.80). If we comprehend human existence as conditioned by 'things'—both natural things and those that are produced by human activity—we can start considering these 'things' as fundamental in the creation of categories of difference that generate differentiated possibilities of action in the world. Modernity has been responsible for generating a world that affords differentiated possibilities of action based on intersectional notions of difference (Mignolo, 2000; Quijano, 2000). These differentiated possibilities of action, therefore generate differentiated human conditions, which is consistent with modernity's colonial logic of difference. This point is critical in making the case of the migrant condition being a condition of the artificial that is legitimized (and consequently, made to seem as part of what is considered natural and inevitable within the artificial) by design.

An ontological grounding of design is necessary to expose how design has aided the "project of modernity" (Fry, 2015). It is through the possibilities of making and/while unmaking, of opening and/while closing (Fry, 2009) that modernity has been able to make and materialize a world that has disabled, erased and negated the possibilities of other worlds (those that don't share the dominant and hegemonic European-based values). This ontological grounding is critical in understanding how design has been "a central technology of modernity" (Escobar, 2018) and how it's been informed by the colonial logic of difference and used to materialize, legitimize and naturalize categories of difference.

Throughout this dissertation, I will consider a number of categories of difference such as gender and race categories. I am particularly interested in setting specific and contextual categories of difference such as Costa Rica(n)/Nicaragua(n), un/documented, in/formality, in/visibility. These are the categories of difference that this research seeks to expose while evidencing how design has been instrumental to the legitimization and naturalization of these dualities.

A CONDITION OF UNDOCUMENTEDNESS: YAMIL

In this dissertation I will pay distinct attention to the condition of undocumentedness, as I argue this is a main technology of migration management and control that materializes in a constellation of documents and proofs of verification that collectively make up a documented condition. There are intricate and dynamic relations between places, things, temporalities, processes, and institutions that make up historical and material forces that generate an undocumented condition. Through a close inspection of these forces it is possible to de-naturalize the undocumented condition—by de-naturalize, I mean uncover and expose the logics that materialize and legitimize undocumented as a condition of otherness that entails specific and

differentiated possibilities of action in the world.

In order to uncover how design is complicit in generating, sustaining and perpetuating other conditions or conditions of othered, I will introduce the story of Yamil, an 18-year-old, undocumented Nicaraguan living in Costa Rica, who I met while I was doing my field work in Río Azul.

When Yamil was a child in Nicaragua his father moved to Costa Rica to look for a job. "El hambre" is his most vivid memory from Nicaragua, he tells me as he grabs his stomach. When his dad first arrived in Costa Rica, he managed to get a job in construction and for a few months, he would jump around from construction site to construction site making just enough money to send back and provide for his family. After a year or so, his father had saved up enough money so that the rest of the family could join him. Yamil, his mother and his younger sister all crossed the border with the help of a coyote. Yamil was 4 years old and does not really remember much from that experience, he does remember the long hours riding the bus from his house in Leon, Nicaragua to the border, and then another long bus ride from the border to San José.

Yamil is now 18 years old. He lives in a modest two-bedroom house in Curridabat with his father, mother, his 16-year-old sister and her 4-year-old daughter. All of them, with the exception of his niece, who was born in Costa Rica, are undocumented. When Yamil was 16 years old he started attending meetings with the Vínculos group. Out of this engagement, he became aware that if he wanted to 'regularize' his migratory status, he probably needed to get it done before turning 18 years old as the process for minors is a lot easier in terms of requirements than for adults. Yamil, who has always wanted to go to university realized it would only be possible to attend if he became 'regularized' or 'documented'. Almost immediately, he asked his mother for whatever identification documents she had of him. This was the first he noticed that his birth certificate—the only document his mom had brought with them when they crossed the border 12 years ago—had a mistake on it: on this worn-out piece of paper he had been designated as a female at birth and not as a male.

He had been home birthed, a practice that even today remains fairly common in Nicaragua. A couple of weeks after he was born, Yamil's mother took him to the local Registro Civil office to register him. She remembers providing the clerk with all the details about where and when he was born and left soon after with her baby's partida de nacimiento [birth certificate].

This brings us to consider how Yamil and his mother's conditions are profoundly interrelated. Yamil's mother dropped out of school right after finishing second grade when she was 9 years old, this was the only formal education she ever received. Currently, she still has below school-grade level literacy skills, which

leads me to think that this could be a reason for why she didn't notice the error in her son's birth certificate.

When she was told to drop out of school, her father told her their family needed her to stay home and help her mother with domestic chores and the upbringing of her 4 younger siblings. She learned how to cook using her grandmother's old wood stove and by the time she was 10 years old, she would make all the meals for her family. When she was 12 years old, she started selling prepared food to help cover her family's expenses: picadillos, chicharrones, vigorones, plátanos fritos, nacatamales, she could make anything her neighbors would ask her. She spent most days of her teen years in the kitchen cooking on her abuela's wood stove, and it would be the same one she used to make breakfast that last day in Nicaragua before moving to Costa Rica.

Two years ago, Yamil's mother came down with a cold and for weeks had a stubborn and nasty cough that she just couldn't shake off. Being undocumented and unemployed, she was hesitant and fearful about going to the hospital. By her husband's insistence, she finally went to Hospital San Juan de Dios (one of the four large public hospitals in San José) to get herself checked out. That same day she was admitted and spent the next two months hospitalized due to a severe respiratory infection. An infection that is common in people that have been exposed to long periods of smoke inhalation. All those years spent in an unventilated kitchen cooking with burning wood had caused her a cronic respiratory disease.

During her time at the hospital, she was told repeatedly that they would have to transfer her to a hospital in Nicaragua to continue treatment because she wasn't insured. She prayed every night she was there and asked God to keep her alive and with her family in Costa Rica. The reasons remain unclear for Yamil's family, but somehow, in the end, the Caja Costarricense del Seguro Social—the state institution that runs the public healthcare system in Costa Rica—decided to cover and continue her treatment in the country. Dios lo quiso, it was God's will, she told me.

Coming back to Yamil, the moment he realized his birth certificate was incorrect, he immediately went to the Nicaraguan consulate in San José to ask how to fix it. He was told by the consulate officer that he needed a lawyer to rectify his certificate and that it could only be done personally at a Registro Civil office in Nicaragua. Because of this one error, Yamil would now have to face a lengthy and costly process that would require him to go back to Nicaragua for the first time since he left as a child. News of his mom's respiratory illness came shortly after these. Money became a critical issue in the household at the time on account of his mother's illness. Since leaving the hospital, Yamil's mother has been oxygen-dependent and will probably continue to need it for the rest of

her life.

Because of his mother's oxygen-dependency, the entire family had to relocate from the house in Río Azul where they had lived since arriving from Nicaragua. They needed a house with street access so that the ambulance could pick up empty tanks and drop off new ones. Their house was at the end of a steep alameda, a pedestrian street that is too narrow for cars and too steep to safely carry oxygen tanks up and down the road. At that point, Yamil gave his dad all of his savings to help cover the costs of moving. Before his mother got sick, Yamil started working part-time to save up the costs of regularizing his migration status. He took any job he could find with the condition that it wouldn't interfere with his school time. He spent some afternoons helping his dad at construction sites, he painted houses during the weekends, he carried groceries for his elderly neighbors, he babysat younger neighbors and cousins, anything that could make him some money.

His father's income ranges from month to month, but he usually earns around 300,000 colones, which amounts to about \$500 US dollars a month; when his mom was well she would sell prepared food and could make up to 50,000 colones, an extra \$80 US dollars a month for the household. These two incomes were barely enough to cover rent, food, utilities, and bus fares for four; but now they've lost Yamil's mother's additional income. Yamil's younger sister had to drop out of school a couple of years ago when she got pregnant at age 12 and now stays at home taking care of her daughter and mother.

Yamil's mother now spends her days and nights next to an aluminum tank that releases a constant flow of oxygen into her lungs. She doesn't cook anymore. She runs out of breath easily so she hardly moves around the house and only goes out if she has a doctor's appointment. It is extremely difficult for her to ride the bus lugging an oxygen tank around and she doesn't like the stares from other people.

Throughout this whole time, Yamil was determined to not drop out of school, he knew enough people that had left school that were unable to go back and finish high school after a break to know that it was a bad idea. He continued taking jobs wherever he could, he would take any form of payment, even food to help out his family, and he would take care of his mother whenever he wasn't at work or school. He eventually saved up enough money to travel to Nicaragua and cover the expenses and legal fees of correcting his birth certificate. One morning he boarded a bus in San José, arrived six hours later to la frontera, he crossed the border *por el monte*² —given that he has never had a passport— he

² El monte is the term used by migrants to describe the process of crossing the border irregularly, not through the proper migratory channels, more on this in Section 5.1

boarded a second bus on the Nicaraguan side of the border and by the end of the day he was in Managua. He spent three weeks in Managua waiting for a lawyer to correct his personal information with Registro Civil.

The day after he got a copy of his new birth certificate, he immediately returned back to Costa Rica, however his birthday was just days ago. Yamil is now 18 years old and he was unable to regularize his migratory status before his birthday. The morning he turned 18, he woke up knowing he wasn't allowed to go to high school anymore, he was less than a year away from becoming the first person in his family to earn his high-school diploma.

As expected, I have curated and interpreted Yamil's story, but the intention of introducing the story of an actual person is meant to show the complexity of the historical and structural forces that have led to his condition of undocumentedness.

His inability to obtain proper documentation is not as simple as the duality of un/documented (having or not having authorization to live in Costa Rica) seems to imply. Through our interactions in the past 2 years, I was able to obtain enough details regarding his life that are useful in revealing the intricate and dynamic relations between places, things, temporalities, processes, and institutions that have all played a part in subjecting Yamil to a condition of undocumentedness. Throughout this dissertation, I argue that these kinds of narratives are critical in exposing the dynamic modalities that re-articulate economic, political, infrastructural, and ideological practices that legitimize conditions of otherness, such as undocumentedness.

The set of situations and specific historical conditions that make up Yamil's undocumentedness are all materialized in diverse sociotechnical systems. The oversimplification that comes from the understanding of his "illegal" presence in the country as a product of lacking proper documentation is highly problematic because it fails to consider the systematic and structural nature of exclusion that states generate and sustain. His irregular migratory status is the result of many systems at play that have different forms of materializing but all are articulated in making up the conditions that have Yamil as an undocumented migrant: the birth certificate, home birthing practices, the wood-burning stove, la alameda, the oxygen tanks, the clerk that filled out his birth certificate, and incompatible information systems between Costa Rica and Nicaragua.

The error in his birth certificate could be attributed to any number of factors, from human error by the clerk at the Registro Civil office, to error induced by the design and layout of the forms and information systems used in Registro Civil, to Yamil having an uncommon name that could easily be mistaken for female or male. At this point it is impossible to know for sure what generated this

design breakdown, what we do know is that this error only became apparent to Yamil when he was 16 years old. His mom is effectively illiterate on account of only finishing up to second grade. She was pulled out of school by her dad so that she could help her mom with domestic chores, a gendered labor practice common in poor households.

Home birthing practices are also common in many parts of the Global South, in Yamil's case, it responds to his family's limited economic possibilities and structural exclusion derived from being poor. His parents lived in a remote area of León, Nicaragua, and access to the hospital was difficult, costly, and timely. Since his birth happened outside of the healthcare system, his registration is deemed irregular— at least according to the modern state logic— in that, it didn't happen within the healthcare infrastructure. If Yamil's birth would've happened in a hospital his registration would have been mediated by the hospital staff, relieving his mom from having to go to the local Registro Civil office and having to check by herself the accuracy of the information on it.

The **wood-burning stove**, although it might seem like a mundane everyday object and common in developing countries, is actually quite important in understanding the historical conditions that led up to Yamil's undocumentedness. The possibilities afforded by the stove prevented his mother from ever returning to school, which is ultimately the reason why she is illiterate. From a young age, her cooking became an important source of income for her family, a family that desperately needed the money to cover living expenses for seven individuals. This form of gendered child labor is common in poor households and is one of the main causes of the feminization of poverty around the globe.

Yamil was born in the same house where his mom grew up: the same remoteness that made it difficult for her to access a hospital when Yamil was born, made electricity unavailable, making burning wood for fuel a necessity. The fumes released by the burning wood infiltrated Yamil's mother's lungs for years. The thousands of hours she spent in a small, confined, unventilated kitchen filled with toxic smoke would eventually result in her lungs developing the respiratory disease that made her oxygen-dependent for the rest of her life. According to the World Health Organization (WHO) cooking with firewood in one of the deadliest environmental risks worldwide, smoke-induced diseases are responsible for the death of 4.3 million people every year, killing more people than malaria or tuberculosis and affecting women and children disproportionately (Langbein, 2017). This wood-burning stove, therefore, becomes material evidence of the structural and historical conditions related to poverty faced by Yamil's family. These stoves are common in what we could call landscapes of poverty and state neglect. These are precisely the conditions that drove them to migrate to Costa Rica in the first place.



One of the *alamedas* of Calle Los Mangos

Although they had electric power in their house in Río Azul, Costa Rica—a marginal neighborhood located in the outskirts of San José made up mostly by informal dwellings—this particular house was located at the end of an extremely steep *alameda*, too narrow for any access other than on foot. These topographic and infrastructural conditions makes it impossible for any ambulance or vehicle to deliver and pick up **oxygen tanks**. Issues of access and mobility are, therefore (re)produced in their Costa Rican context as well, as these issues of marginalization are usually first tied to conditions of poverty and (re)produced in conditions of undocumentedness (I will elaborate more on this point in Section 4.5).

What I want to expose with this particular case is how all of these situations collectively generate Yamil's current undocumentedness, although none of these were intended to intentionally produce an undocumented adult. These objects, such as the stove and the paper-based birth certificate; these infrastructures, such as the Nicaraguan electric grid and healthcare system and the *Registro Civil* information system; these environmental conditions, such as the toxic smoke of firewood, and the topographic characteristics of Río Azul can all be understood as dynamic modalities of power that operate in the form of *bordering designs* (Chapter 4).

Yamil's story illustrates how "the social is never just social", but it is also "simultaneously technical, architectural, textual, and natural" (Law, 1991, p.166) These dynamic forms of exclusion, that are articulated by the many complex relations between systems of information, systems of infrastructure, specific ecologies make up paradigms of state power that become visible through the experience of those excluded. The complexity of the historical and social conditions that have affected Yamil's family in perpetuating genealogies of exclusion and subalterity, is erased as a result of simplistic categorizations between documented and undocumented, a category that is foundational in structuring and organizing modernity. These dynamic modalities of power require a systems-based reading that considers how design has been used for spatial and temporal reproductions of power.

Considering Yamil's current undocumentedness as the product of not having legal migratory status in Costa Rica is an oversimplification of a really complex set of situations and specific historical conditions— expressed in economic, political, and ideological practices. Unfortunately, this oversimplification is institutionalized: individuals are responsible for ensuring their legal status in the country, the state's responsibility is providing the mechanisms and systems that allow this change of migratory status. Therefore, if an adult such as Yamil is unable to 'legalize' his presence in the country, Yamil becomes a subject

that is punished³ by the state in the form of banning and excluding him from public spaces that fall under governmental jurisdiction. This becomes evident in Yamil's immediate exclusion from the public, state-managed, education system and his subsequent exclusions from other systems and services, which can consequently result in the 'death of social life' (Mbembe, 2013). Practices of exclusion are effective technologies of governmental control and they serve as mechanisms for regulating and controlling the domain of everyday life. These issues will be disclosed in further detail in the following sections, which intend to draw the explicit relationship between design and power.

2.3 DESIGN AND POWER

In order to consider design's role in generating and sustaining any human condition based on othering it is necessary to establish the relationship between the design and power: how has design been used to effectively exert power that results in differentiated possibilities of action? In this section I will introduce some theoretical considerations that allow us to situate design in the architecture and scattering of state power. Although there is design studies scholarship that ties design and power, my intention here is to provide a more specific reading of how the logic of state power instrumentalizes the condition of undocumentedness as a mechanism of control and how power is articulated materially in ways that generates the undocumented condition. This position is fundamental to making the claim that the undocumented condition is a designed condition.

DESIGN AND MICROPHYSICAL POWER

Design has a long history of being used in relation to power. According to Domínguez Rubio and Fogué's (2015) design's complicity with the exertion of power is mostly due to the possibilities it offers in rendering the visible, invisible: "[design] has emerged as a sui generis form of 'material politics', that is, as a form of doing politics through things which offers the possibility, or at least the promise, of rendering power tacit, invisible, and therefore unchallengeable by making it possible to control that vast 'sub-political' world of physical and technological elements that silently shape and condition our actions and thoughts, but which typically remain outside the sphere of formal politics and institutions" (p.2). The authors' analysis of design in reference to Foucaut's disciplinary power illustrates the relational nature between the logic of state power and the material and technological possibilities. This relationship is critical in understanding how the logic of state power in relation to migration control and management has changed according to new material

³I'm using punishment in a Foucauldian sense, which I will elaborate more in the next section of this chapter

and technological developments.

In Foucault's texts concerning the issue of power, he considered that power had basically evolved in two basic forms, these two powers, according to Foucault, are to be understood as "two poles of development linked together by a whole intermediary cluster of relations" (Foucault, 2013 [1976], p. 44). The first of these poles is what he referred to as discipline and it targets the individual body. This kind of power considers the body as a machine: the mechanisms of discipline are intended to make the machine as effective and useful as possible in its integration within systems of economic control. The development of microtechnologies of power was critical to the foundation of the modern institution of discipline. These micro-technologies or devices of micro-physical power offered the possibility of enacting a new logic of power into the body, in this sense the body was considered something that could be shaped or formed based on its usefulness, for which design was fundamental to the formation of the modern disciplinary institution (Domínguez Fogué & Rubio, 2015).

Foucault's concept of the micro-physics of power is used to describe mechanisms by which power is enacted, not by means of law or policing, but by rendering power invisible and embedding it within processes in which we carry out our everyday lives such as schools or hospitals or the development of modern psychiatric sciences. What needs to be noticed is that the scattering of power by micro-technologies is extremely efficient because it makes subjects accountable for their own discipline. In this sense, discipline must be understood as a form of power that requires enclosed spaces to operate; factories manage workers, modern mental health practices make subjects aware of their deviant behaviors, and schools regulate children's conducts.

The physical devices that inscribe disciplinary power within these institutions create the possibilities for individuals to discipline themselves, they are effective because they make subjects visible and aware of their own behaviors by generating reflections intended to discipline towards an ideal subject. In this sense, populations will govern themselves under the threat of subsequent punishment. It is possible to locate material configurations of power with modern institutions, not necessarily under the logic of sovereign or governmental power, but power intended to discipline society—in this sense we can think of Foucault's microphysical power as a mechanism to order and control the individual (by the individual's means) in an attempt to obtain society-wide cohesion. Just think about the design and arrangement of school desks and how these allow for a very particular kind of interaction between school teachers and their students as well as enabling or disabling interactions among fellow students in a classroom. These forms of microphysical power are present in most democratic institutions of modern nation-states and are successful in exerting control because of their intangibleness, they are weaved within the

whole structure that sustains the state. Their ubiquitous nature allows the logic of control to become infiltrated and normalized in everyday life.

If we take for instance Yamil's case, it is possible to identify how the state punishes him as an adult that is unable to rectify with deviance with the society-wide order: since he is unable to "regularize" his migratory condition, when he turns 18-years-old instead of becoming a subject of rights, he becomes a punishable, but highly disciplined (by the public education system) subject. One could argue that this is part of a greater design: a dual labor system (Chomsky, 2014), in which some workers are granted upward social mobility, while others are legally and structurally stuck at the bottom carrying out low skilled work. I will elaborate on this more in Section 4.5 of this dissertation, but it is worth noting that this dual labor system relies heavily on categories of difference imposed by colonial logic such as race and gender that establish processes of differential inclusion and "differentiated forms of exploitation of the different sectors of a fractured labor force" (Hall, 1986). This system is highly dependent on the availability of large exploitable (undocumented) labor force. In Yamil's case, the state protection (access to education and health, despite being undocumented) as a child makes him a disciplined subject, a subject that is then rendered into exploitable (but disciplined) labor. In Chapter 4, I will expand further on the issues of discipline and undocumentedness to consider how the Costa Rican state uses this condition as a disciplinary mechanism based on the threat of deportation and exclusion from the welfare state.

This logic of disciplinary power is delegated to state and non-state actors in a manner that the complex and diffused networks of disciplinary microtechnologies appear to be invisible but the entire population is subjected to it through the interaction with schools, modern health institutions, mental health, judicial institutions, and systems of apprenticeship. All these institutions have 'minor instrumentalities' embedded in them with the purpose of shaping and molding bodies into productivity and effectiveness. Following the industrial-capitalist logic, bodies could be fabricated ("se fabrique", Foucault, 1975, p. 137) in the same sense humans would fabricate highly productive and efficient machines, bodies are being designed to be efficient and productive. These micro technologies or minor instrumentalities of power are to be understood as conditioning forces, in Arendt's sense, they are made up of objects, infrastructures, bureaucracy, fiduciary systems, education systems, etc. In this sense we could also make the claim that Yamil's body was designed to be highly productive and exploitable (by means of his undocumentedness) labor.

DESIGN AND BIOPOWER

The second pole of power Foucault describes is that of biopower. Biopower must be understood as a form of power that emerges from a different logic

than discipline. It appears in Foucault's work after his conceptualizations of discipline and differs from discipline as it does not target the individual body, but instead seeks to control populations. This concept was first introduced in his "Society Must be Defended" lectures in Paris (1975-1976) and was used to describe the change in state logic that was responsible for shifting the exertion of sovereign power over territories to the exertion of sovereign power over populations.

Biopower is the form of power that deals directly with life and the reproduction of life; making the welfare of the population its main concern. Biopower "focused on the species body, the body imbued with the mechanics of life and serving as the basis of the biological processes: propagation, births and mortality, the level of health, life expectancy and longevity, with all the conditions that can cause these to vary. Their supervision was effected through an entire series of interventions and *regulatory controls: a bio-politics of the population.*" (Foucault, 2013b [1976], p.44)

When producing a healthy and productive citizenry becomes a matter of importance for nation-states, population management technologies are developed and deployed to regulate labor power, in this sense, the population is valued by its capability of performing productive labor. With this shift, the old paradigm of sovereign power as 'the right to kill' (Agamben, 2003) was replaced by "the administration of bodies and the calculated management of death" (Foucault 2013b, [1976], p.44).

Unlike discipline, biopower is not exclusive to enclosed spaces such as the factory, the school, the hospital; instead, it manifests as a managerial system of life through the calculus of probabilities: births, deaths, marriages, the reproduction and sustainment of life, through "comprehensive measures, statistical assessments, and interventions aimed at the entire social body or at groups taken as whole". (Foucault 2013b, [1976], p.47). The logic of biopower emerges differs significantly from disciplinary power as it aims to make humans "not disciplined, but *regularized*" (p.67). This regularization falls directly in the domain of populations and the reproduction of life.

Beyond the mechanisms introduced by biopower such as forecasts, statistical estimates, and overall measures, biopolitical technologies have become extremely pervasive as instruments of control. "Passports, visas, health certificates, invitation papers, transit passes, identity cards, watchtowers, disembarkation areas, holding zones, laws, regulations, customs and excise officials, medical and immigration authorities" (Walters, 2002, p.572) serve the purpose of controlling humans in terms of access to processes that "foster life or disallow it to the point of death" (Foucault, 2013b [1976], p.43). This brings us to the issue of biopower and control, an issue that is critical for disclosing how

design and bordering systems are related and the ways design adopts the logic of biopower to control migrant populations within nation-state boundaries.

Delueze's (1992) society of control considers an evolving form of discipline that moves beyond the enclosed structures in which Foucault's disciplinary instruments reside. It considers how the government of populations now operates in open systems and networks, similar to how Foucault's biopower differs from discipline. For Deleuze, it is through technological advancements that control is embedded in open and networked systems—that respond mostly to economic interests and neoliberalism (for example, the factory is replaced by the corporate system). These systems transcend the disciplinary institutions. "The society of control might thus be characterized by an intensification and generalization of the normalizing apparatuses of disciplinarity that internally animate our common and daily practices, but in contrast to discipline, this control extends well outside the structured sites of social institutions through flexible and fluctuating networks." (Hardt and Negri, 2013, p.216)

Nail's (2016) exploration of the relationship between Foucault's biopower and Delueze's control is useful in the context of the material exploration of how power and control is embedded in technologies and materials:

"Both [biopower and control] take the life of populations as their content and the management of probability as their form. But the statistical control over the life of populations should not be understood in the limited sense of biological beings alone. There is also a life of the city, a life of crime, political life, economic life, etc. Foucault and Deleuze are both quite clear in their examples of biopolitics that it includes the management of city-planning, money, transportation, crime, information, communication, water, sheep, grain and the climate, just as much as it is the statistical management of human births, deaths, marriages and illness. These are all living forces insofar as they are ultimately uncertain and non-totalizable phenomena. Accordingly, they cannot be managed as individuals, but only as populations with non-assignable limits: as multiplicities, as zones of frequency." (Nail, 2016, p. 261)

This succinct review of ideas around notions of power and control is useful to start understanding how and why the logic of state power shifted from the allocation of sovereign power to nation-state borders to the development of more inconspicuous and scattered bordering systems intended to target bodies and migrant populations and not territories. As this review of the relationship of power and control demonstrates, design is instrumental in creating the material and technological possibilities to scatter power over entire populations rendering it invisible while making the body the site of border struggles, this is

what will be referred to as *bordering designs* (the concept will be elaborated in more detail in Chapter 4 of this thesis).

COLONIALITY OF POWER

However, a reading of power centered only on the perspective of Europeangrounded concepts proves to be insufficient for the argument of this thesis. Foucault's ideas operate and derive from the Eurocentric dominant paradigm of power and he does not consider how colonial logic shapes and conditions manifestations of power and control. Foucault's and the other author's work previously mentioned fail to recognize how colonial logic is used to shape racial classifications in the project of modernity and how it continues to operate in the classification of populations based on intersectional difference beyond race. This is an issue that is fundamental in understanding how Nicaraguans, as a racialized population in Costa Rica, are subjected to dynamics of power that make the population fall into differentiated forms of exploitation within a fractured labor force (Hall, 1986). According to Castro-Gómez (2000), what this means is that Foucault's ideas of power must be expanded in order to include a world-systems perspective (Wallerstein, 2004) to properly understand how these power systems operate in accordance to a global capitalist system that relies on geo-political ideas of "otherness" to constitute a racially segmented labor force.

Aníbal Quijano's (2000) concept of "coloniality of power" is useful to expand on the Foucaldian concept of disciplinary power. It considers how state power is configured within larger structures of power based on the colonial relationship between centers and peripheries. In doing this, it allows us to understand how the project of modernity generates disciplinary mechanisms that respond to a double logic: on one hand, it acts within the state boundaries in an attempt to create a homogenized identity by means of subjectification; and on the other hand, it is exerted outward by the hegemonic world-system powers to ensure the flow of raw materials for production from the peripheries towards the centers, both are processes that make up the same structural power dynamics (Castro-Gómez, 2000). An expanded perspective of Foucault's concepts of power is quite important in the context of this research, by failing to consider colonial logic, Foucault's sole concepts are insufficient to recognize the power dynamic that are exerted over Nicaraguans in the context of Costa Rica as the historical process of Costa Rica's nation-building produced an idea of Nicaraguans as racialized others.

This leads us to having to resort to a reading of power that intentionally uncovers colonial logic to understand how power is programmed to operate differently depending on individual identities. Achilles Mbembe (2013) provides a reading of Foucault's biopower that goes beyond sovereign power understood as just

the 'right to kill' (droit de glaive) and develops the concept of necropolitics in which he considers sovereign power as the right to impose social or civil death and other forms of political violence beyond biological death. Necropolitics considers sovereign power as it relates to Giorgio Agamben's (2013) state of exception in which humans are stripped from any political status and are reduced to 'bare life'. Mbembe's necropolitics considers colonial logic which is foundational to making sense of how racism functions as a technology of exclusion; his concept of necropolitics considers the logic of state power that subjugates bodies into a state between life and death: conditions of slavery, apartheid, the colonization of Palestine, all have created the material conditions that force populations to dwell in a condition of precarity and subalterity. I believe that in the case of Costa Rica and Nicaragua these mechanisms of social exclusion are fundamental in understanding the experience of Nicaraguan migrants in Costa Rica.

Other scholars from black studies and critical ethnic studies provide crucial viewpoints that consider race the center of political violence and processes of (de)humanization, a condition that is often overlooked in Foucaldian biopolitical discourses. Weheliye (2004) considers race to be critical in the understanding of "sociopolitical processes of differentiation and hierarchization" that support the practice of biopower: "there exists no portion of the modern human that is not subject to racialization, which determines the hierarchical ordering of the Homo sapiens species into humans, not-quite-humans, and nonhumans" (p.8). These hierarchical categories of humans are crucial to uncovering the state logic that determines who has the 'right to have rights'. In this sense, it is worth noticing that indigenous populations in Costa Rica were not included in the system of national identification and registry until 1991 (Ley de Inscripción y Cedulación Indígena de Costa Rica Ley N° 7225 del 19 de abril de 1991). Under state logic, these indigenous individuals were not considered humans in the sense that they were not entitled to the rights of the citizenry, the material lack of identification and registration uncovers the colonial logic of the Costa Rican state.

In the case of undocumented economic migrants in the context of Costa Rica, as with most modern states, the state enacts sovereign power by "the practice of multiplying for some the risk of death or of subjecting dangerous bodies to marginalization, expulsion and/or elimination of certain bodies [in order to secure] the protection of others" (Inda & Golding, 2013, p.104). The development of technologies of power that are concerned with "the welfare of the population, the improvement of its condition, the increase of its wealth, longevity, health, etc," (Foucault 1975, p.100) affords governments a direct involved in the regulation and management of migrant populations and in the case of women, these technologies intervene in their capability of reproduction and issues regarding their body and health. Migrants that are unable to regularize their

migratory status and obtain proper documentation are not granted equal access to services such as healthcare, education, unrestricted mobility, and decent housing, reducing migrants to conditions of uncertainty and precarity.

In the context of this research, the logic of coloniality becomes critical to exposing the codification of difference between Costa Rica(ns) and Nicaragua(ns). Quijano (2000) considers that there are two fundamental axes in the construction of modernity's model of power, the first one being the "social classification of the world's population around the idea of race" that continues to operate in today's model of hegemonic power by the codification of difference. The second axis is "the constitution of a new structure of control of labor and its resources and products." (pp.533-534). These two axes are critical in uncovering why state power is interested in producing and sustaining a pool of exploitable, undocumented workers. Given that this research focuses on economic migrants who are women, considering labor segmentation on the basis of gender and race is critical to understanding how these migrants get incorporated in the workforce and how they are mostly rendered to underpaid domestic and care labor.

The specific exploration of design proposed in this research aims to build awareness of how design has been critical in sustaining the logic of coloniality/modernity (Mignolo, 2000). From the Latin American perspective, coloniality is critical to understanding how categories and hierarchies of difference have endured since colonial times to the point where it is so naturalized that it has become the 'muted' force that gives shape and structures Latin American society (Quijano, 2000). These colonial differences have created *borderzones* or *borderscapes* as sites where cultural difference is asserted, contained and (re) enforced. This issue will be expanded on in the later sections of this dissertation as it becomes fundamental to understanding the conditions of Nicaraguans in Costa Rica. These borderscapes, in which I situate Río Azul—the site where most of my fieldwork was carried out— can be seen as symptomatic of the logic of coloniality and how it has relied on spatial designs and practices for its enaction (Fanon, 1967), "[colonialism is] constituted through its arrangements of spaces, places, landscapes, and networks of connection" (Ogborn, 2007, p.4).

These theoretical considerations will be used to guide the discussion in Chapter 4 that is centered on a phenomenological analysis of *bordering designs*. While design is able to materialize and naturalize certain conditions imposed by state logic, such as undocumentedness; design also allows the possibilities of those who are forced to dwell and inhabit these conditions to (re)structure and change them. This is another form of power and the ways it relates to design is different from state power. In the next section I will introduce some theoretical considerations around forms of power that seek to counter or contest sovereign and hegemonic powers, which will be used to sustain the discussion in Chapter

5 that is focused on *contestation designs* by undocumented migrants.

2.4 DESIGN AND THE POWER OF LIFE

Up to this point, the kinds of designs I have described emerge from the logic of power and control produced by the state and non-state actors that participate in the exercise of hegemonic power. But I have yet to refer to the kinds of designs that emerge as a response to these designs. Foucault's concept of biopower describes power over life, which is the administration and production of life informed by the government of populations. It is the logic that generates designs intended to dominate, control, regulate, subjugate and in the most extreme cases negate life. These designs, inevitably, produce other designs that seek to counter the exercise of power. Hardt and Negri (2013) refer to this as the biopolitical event, that is the production of life "as an act of resistance, innovation, and freedom" (p.241).

"[Foucault's] analyses of biopower are aimed not merely at an empirical description of how power works for and through subjects but also at the potential for the for the production of alternative subjectivities, thus designating a distinction between qualitatively different forms of power." (Hardt & Negri, 2013, p.239). The biopolitical event, therefore, becomes the *power of life*, the exercise of power that contests the negation and control of life and that materializes acts of innovation that seek rupture with subjugated modes of life. This is the power that is exercised through forms of contestation in everyday life practices of subaltern subjects, among them migrants.

In this sense, the biopolitical event is concerned with the production of alternative subjectivities as a result of a society of control. Humans that are free—freedom and resistance are necessary preconditions for the exercise of power (Foucault 1975, Hardt & Negri 2013, Deleuze 1992)— have the capacity to act and the power to resist, and therefore every relationship of power entails a program of struggle. Agency, therefore, is encompassed in the biopolitical understanding of freedom, as the ability to resist the state's biopolitical programs entails individual agency that can be exercised through civil disobedience, for example. As we will see in later sections of this thesis, escaping the biopolitical state can be done through more complex tactics of rendering oneself as invisible or useless in terms of labor power for the state, practices that are common among stateless o indigenous subjects.

Another way of understanding relations between biopower and the biopolitical event is through Michel De Certeau's (1984) analysis of everyday life practices. De Certeau uses the terms of strategy and tactics to describe the ontological relation of power that generates calculated actions— or what we would call

designs— that create structures of regulation and control on one side, and structures of contestation on the other.

Following De Certeau, strategies originate from hegemonic structures of power and are available to subjects of "will and power", defined as having an institutional location to implement "a schematic and stratified ordering of social reality". In this sense, we could consider strategies at top-down designs and in the case of migrants, we could consider these *strategies as border-reinforcing* (I will expand this concept in Chapter 4).

"I call a "strategy" the calculus of force-relationships which becomes possible when a subject of will and power (a proprietor, an enterprise, a city, a scientific institution) can be isolated from an "environment." A strategy assumes a place that can be circumscribed as proper (propre) and thus serve as the basis for generating relations with an exterior distinct from it (competitors, adversaries, "clienteles," "targets," or "objects" of research). Political, economic, and scientific rationality has been constructed on this strategic model" (De Certeau, 1984, p. xix).

Tactics, on the other hand, are formulated and performed by subjects that seek to contest the strategies of power, they are developed in a responsive manner, in this sense, they are impermanent and boundless to institutional locations.

"I call a "tactic," on the other hand, a calculus which cannot count on a "proper" (a spatial or institutional localization), nor thus on a borderline distinguishing the other as a visible totality. The place of a tactic belongs to the other. A tactic insinuates itself into the other's place, fragmentarily, without taking it over in its entirety, without being able to keep it at a distance. It has at its disposal no base where it can capitalize on its advantages, prepare its expansions, and secure independence with respect to circumstances. The "proper" is a victory of space over time. On the contrary, because it does not have a place, a tactic depends on time—it is always on the watch for opportunities that must be seized "on the wing." Whatever it wins, it does not keep. It must constantly manipulate events in order to turn them into "opportunities."" (De Certeau, 1984, p. xix).

These two concepts are useful in our analysis of the undocumented migrant condition because we can start identifying border-reinforcing strategies—as those that respond to the state's biopolitical program— and border-crossing tactics— as those that emerge from migrants' everyday life. As we will see in later sections of this thesis, the operational schemas that make up the biopolitical strategies privilege spatial relations of power as they have institutional bounding, while tactics privilege temporal relations of power given their responsive and

impermanent nature.

This research seeks to uncover how strategies have been designed (and use the material and technological possibilities of design) that make the architecture of biopower invisible, diffused, networked and far more reaching. It is by design that deterritorialization of the nation-state border has profound consequences for the practices of everyday life of migrant populations. Everyday life has become a set of calculated and designed actions intended to preserve and reproduce life, "events of resistance have the power not only to escape control but also to create a new world." (Hardt & Negri, 2013, p.242).

In the next sections of this thesis, I use the ontological grounding of design, with the previous theoretical considerations in combination with experiential knowledge coming from undocumented migrants for two purposes: the first one intends to uncover the convergence and divergence of a number of different logics present in Costa Rica— such as the logic of state practice, the logic of bureaucratic practice, the logic of control, the logic of surveillance, the logic of welfare, the logic of coloniality—, and the ways these logics materialize to generate and sustain the undocumented migrant condition. The second purpose is to uncover how by impossing a condition of undocumentedness, undocumented Nicaraguan women are forced to resort to using other kinds of logics—such as the logic of (in)formality, the logic of (in)visibility, the logic of contestation—to develop tactics and practices aimed at countering state exclusion and migration control, and how these materialize in order to sustain and reproduce life.

CHAPTER 3. RESEARCH IN THE BORDERS: A METHODOLOGICAL APPROACH

My aim with this dissertation is to use the lived experience of undocumented Nicaraguan women living in Costa Rica in order to situate design as a conditioning force and make the claim that their undocumentedness is naturalized by design, and how it generates alternative practices intended to contest this conditioning force. This requires us to do a number of things, initially it requires us to expand on how design is traditionally conceptualized, which I have done in the previous section of this thesis (Chapter 2). Subsequently, since this research focuses on subjective experiences, I must consider appropriate methods that allow us to get a sense of what the border means in terms of everyday life for undocumented women. Given that this dissertation aims to build an understanding of the border that goes beyond the static cartographic line that separates Nicaragua from Costa Rica, and focuses on exposing the border as a material force that shapes and conditions everyday life for undocumented migrants; I must situate my research in the experience of undocumented women.

In the following chapter I will present some theoretical considerations that informed and guided the methods I used while conducting field research for the past two years. I introduce this chapter with a research workshop (that did not go as planned), which took place early during my field research. I then present some reflections regarding this failed workshop and why I believe my initial approach was wrong and how it forced me to consider methods beyond the ones used in traditional design research as they proved to be limited and culturally inappropriate in the context of my research. I consider how these traditional design research methods stemming from design thinking are not appropriate methods for situating research outside of the Anglo-European model and how these are insufficient in exposing design's role shaping explicit and implicit power relations.

As a result of this reflection, in this chapter, I resort to other kinds of methodologies that consider contextual and alternative knowledge production. I explore feminist, decolonial and indigenous theory and methods to establish better research practices for social design or any kind of research in the realm of socially-engaged design. Throughout this chapter, I discuss some considerations about situating design practices in a particular context away from the Anglo-Eurocentric centers. I introduce some methods that allow us to understand the context and historical specificity in order to make sense of the experience of racialized, undocumented women in the context of Costa Rica. It considers the implications of doing research in a language different

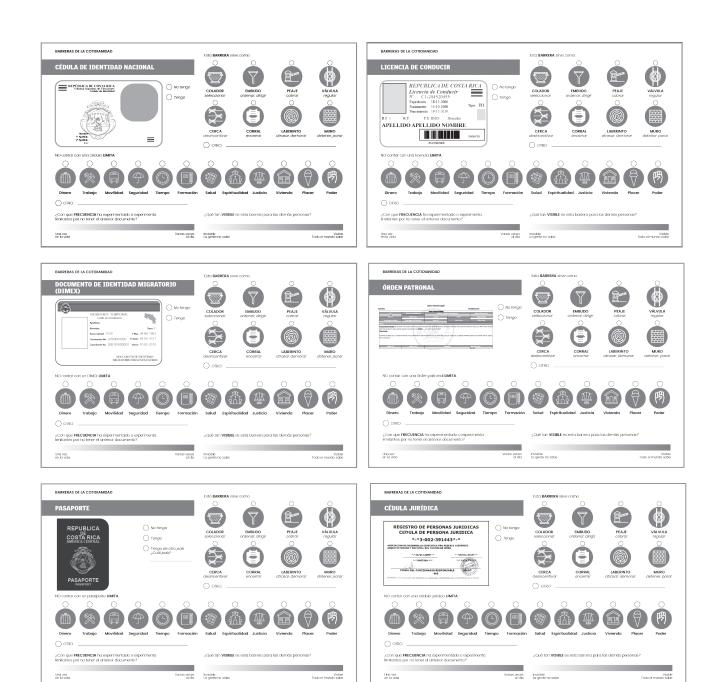
than English, which could be regarded as design's universal language and questions design's own terminological limitations. Additionally, this chapter discusses the role of the design researcher, my role, and suggests that in order to carry out research that deals with complex social systems, I should adopt a critical reflexive stand, making explicit my interpretations tied to their my own subjectivity, as someone who is a Costa Rican citizen doing research for a U.S.-based institution.

This chapter concludes with some methodological considerations needed to establish a culturally appropriate, situated design research practice. These considerations not only guided the field research component of this dissertation, it also provided a framework for the analysis of the subsequent chapters. Therefore, It can be read as a methodological contribution to design research because it was generated from the realization that design research as defined by mainstream design fails to recognize other forms of knowledge production that emerge from (other) human conditions.

3.1 A FAILED WORKSHOP

In September of 2018, I was starting my third year in the Ph.D. program and had recently relocated back home to San José, Costa Rica after living in the United States for the past 4 years while I was a grad student. Before I actually moved back to San José, I spent part of the summer in Pittsburgh planning out (mostly speculating) about my future research plans, how to carry out the field research that I needed to answer the generating questions I had at the moment. Would it be possible to create a typology of bordering devices/processes (which I would later come to call bordering designs) based on the everyday experience of undocumented Nicaraguan women? Can we use design research to articulate everyday life bordered experiences?

A couple of weeks after moving back, I arranged to conduct a brief workshop with a small group of women that were part of a grassroots organization centered on issues of with migrant rights. At the moment, my previous experience with design research was that the common workshop models are flexible enough to carry out research in any number of settings. I designed a set of cards that I would use during that workshop, I called these *Barreras de la Cotidianidad* (in English, Everyday Life Barriers—incidentally, this was a moment where I became aware of the challenges of doing design-related research in a language other than English). Each one of the cards had a visual representation of either an object, a public service, something referring to infrastructure, a person, or some form of cultural trait; these were some of the everyday bordering devices I had come up with and that I was hoping would get participants familiarized with the concept of *everyday bordering* and that would start a group conversation that could end



Barreras de la Cotidianidad Cards

up generating some new cards based on their own experience.

At the time, I was exploring the use of visual analogies; bordering devices perform many functions: they open/close spaces, they regulate and order populations, they stop/allow the flow of people, etc., so I thought that I could use tangible objects that normally perform those functions to illustrate the many roles of bordering devices, and, that way, the participants could tell me what they perceived the function of each device was. In addition to these functions, the cards prompted the participants to think about the process of bordering and the kinds of resources and services they either enabled or disabled, for example, not having an ID can significantly limit a person's access to housing, financial systems, education, etc., basic services needed to reproduce everyday life. All of these services were represented using simple, graphic symbols. Finally, these cards asked the participants to think about the frequency in which these devices disrupted their everyday life and how visible they thought the bordering effect inscripted in these devices was for people who don't necessarily experience these devices as bordering. At the time, the intended plan was that these cards could serve as a sort of "visual survey" and with the data collected, we could start thinking about creating a typology of everyday bordering devices in order to locate these objects and processes that were serving the role of controlling and regulating migrants' bodies in the Costa Rican context.

At this point, it's necessary to break down my own logic of why I considered these cards were right for this particular moment in the research process. Without knowing for certain where the workshop(s) would happen or how many people would attend them or even if I could count with additional technology or ample table space to spread out materials, I designed something that could be packed and moved around easily and that I could print out on the spot depending on the number of participants. I thought the use of cards allowed the workshop(s) to work regardless of material constraints of space, technology, and number of participants. Regarding the design of the content, I was looking to explore with more visuals and less text, hence the reliance on graphic symbols. I assumed there would be varying levels of literacy among the women and I didn't want that to be a deterrent from participating, I was also planning on accommodating anyone who had major reading limitations and facilitating more personal sessions with the cards.

I considered that using visual analogies could be a good manner to expand on the definition of a "border" that considered the proliferation of its forms and functions. I thought that these cards were a clever way of making something that sounded extremely conceptual take a more concrete form that could still be abstract enough to be associated with the intangible and uncomfortable embodiedness of feeling a "border".

Finally, and probably the foremost reason why I used cards for doing design research is that as a researcher, I had used some decks of cards before quite successfully in other workshops and I had even participated in workshops that used decks of cards somewhat similar to these. Basically the format of the cards and using these kinds of symbols and visuals to try to understand complex concepts seemed to work in my experience as a designer in the United States.

A group of three undocumented Nicaraguan women volunteered to do a small, informal test run of the workshop I was planning on conducting more formally and with a larger group in mid-October. I had contacted a couple of community organizations and one of them, Vínculos, had agreed to meet and chat with me—as it turns out, I would eventually end of conducting most of the field research for this dissertation through this organization, but at that time I was just building rapport with them. Before this mini card trial, I had met some of the women from this organization and we had already discussed the possibility of collaborating in some research together. I had previously attended a public presentation run by the Vínculos organization where they shared the results of a study on the subject of national legislation that directly affected young migrant women and children. The women in this organization found the focus and scope of my research interesting and were willing to get women to participate in some workshops I had planned at the time, one of them being this typology-building one.

The woman that leads and runs Vínculos, Ixchel, offered her house in Barrio Córdoba to host the workshop. The three women that were willing to participate were all Nicaraguan and had jobs as domestic workers for middle-class families in San José: two of them were undocumented and one had her DIMEX (Costa Rican residency permit, more on this later). All three of them were mothers, in their late 30s-early 40s, they lived in Río Azul or Linda Vista—neighboring towns at the margins of San José that both have a large Nicaraguan population—where Vínculos is located and focuses most of its programming.

We met around Ixchel's dining table, we cleared out piles of Vínculos-related printed materials, informative brochures, reports, spreadsheets, and other documents to make room to work on. I had printed out 15 cards for each participant 10 of them had existing bordering devices on them and 5 were blank, hoping that by the end of the workshop, the participants would be familiarized with the concepts and ideas so that they could populate the blank cards using their own lived experience. I stacked a small pile of cards in front of each of the women and used some cards printed out in a larger format to explain the activity. I found myself struggling to use language that wasn't overly academic to somehow explain the idea of a bordering device, which, in retrospect, I think I could've done better, but the women nodded to indicate that they were following me. I allowed a moment to ask questions, but I only got silence in

return. I then asked them to take a look at the cards, I took one that had the Costa Rican ID on it and I used it to explain what these cards were intended for, how I had designed them as an instrument for gathering data on everyday bordering devices, how the information provided on these cards would allow me to start a typology of bordering devices through these women's experience.

The women then proceeded to take the cards, two of them spread them all out on the table, they took a pen or pencil I had laid out in the center of the table and stared at the cards in silence for a couple of minutes. It was my impression that they were trying to make sense of the different cards. Questions now started emerging, they weren't sure of how they should fill the cards out, if they had to write down something or if they just had to mark them, they had questions about the devices I had chosen, and there were many questions about the whole idea behind the visual analogies. I attempted to answer all of them in the clearest way I could, and, eventually, all three women started to fill out the cards with a considerable degree of hesitation. There was clearly an air of uncertainty of whether or not they were doing it right, I tried being as reassuring as possible about the fact that there was no wrong way to fill them out: they could jot down their immediate responses on them, they could include reactions, observations, notes, descriptions, etc. I had designed these cards because I assumed anyone could fill them out by using minimal to no written text, the task mostly involved marking and single choice selections, but this didn't come through clear enough from the design of the cards. These women went through their pile of cards, they completed some cards with more detail than others, and it wasn't until the workshop was over that I realized none of them had filled out the blank cards I had provided to get them to generate their own bordering devices informed by their own experience.

What this trial immediately exposed was that there were obvious design flaws of the materials and the language I had used—both during the facilitation as well as in the cards themselves—and that these had not been culturally or contextually appropriate. I left the workshop with some filled out cards that gave me little to no new information, which was not the participants' fault, but it was evidence of the cards' own limitations. Most of all, I left this workshop with a really uncomfortable feeling that I had wasted the participants' already limited time and that I had potentially ruined a good collaboration opportunity with Vinculos. The workshop got me to question the nature of the information and data I wanted to collect, was I asking the right questions? Was I approaching the subject matter in a respectful and thoughtful manner? Should design research even be exploring these issues? It wasn't until some weeks after this, that I realized this wasn't a failed moment, it failed as a research moment, that got me to rethink the whole direction of my research.

The reason why I wanted to start off with this failed research moment is because I

believe it serves two purposes: first, it evidences how practice-based research and, particularly research that involves fieldwork—can not be thought as a linear process, it's in fact quite messy in how it unfolds and needs constant revision as it starts revealing the researcher's (my) own preconceptions and assumptions. As a Costa Rican citizen I overly simplified the undocumented Nicaraguan condition and wrongfully though that a deck of cards could be used to gather subjective experiences regarding an extremely complex social issue. Secondly, I believe that sharing this one experience— which at first glance might appear small in the context of a whole PhD research—, is valuable since it was the moment that made me realize I didn't really have the tools or context to conduct respectful and appropriate research regarding the experiences of undocumented Nicaraguan migrant women. Most of the following chapter is the product of my own process of reflection that came after this workshop; it emerged from that uncomfortable feeling of confronting my own assumptions as a researcher and recognizing my limitations in understanding a situation that doesn't directly affect me.

3.2 THE PROBLEM WITH THE UNIVERSAL

Design is usually associated with concepts such as modern and universal, and since the establishment of the professional practice of design, it has carried an underlying agenda of universality that's been supported by vast systems of mass production and distribution that made sure products and systems reached the entire globe. The 'Designed in Cupertino, made in China' system of mass production ensured—by use of underpaid labor and exploitation of those in the Global South— Western-design's repopulation of the Earth. Even when the planet started facing product saturation, design shifted its attention to services, and with the same logic, exported these services and (re)produced homogenous social practices all over the world. We could see this project of universality fulfilled the moment a Roomba vacuum cleaner; which is produced by iRobot a company founded by 3 previous members of MIT's Artificial Intelligence Lab who designed robots for military defense, and was assembled by cheap labor in China—is bought in a Walmart in San José, Costa Rica (as a side note, related to this research, this same Roomba is the reason why María, a Nicaraguan domestic worker became undocumented as a result of getting laid off from her job and losing her residential permit because the middle-class family for which she was working for deemed her labor unnecessary).

It is worth noting that there are few human activities that have aided the "globalization" project more than design (Appadurai, 1996). Western-logic (rooted in colonialism and imperialism) has utilized (non-Western) cheap labor to export products and infrastructure to the rest of the world which inevitably produces homogenous practices; and in the case of the Roomba, some of these

practices end up replacing human labor by automatization. Although, there is still a significant population of designers that have an allegiance to mass-production and world-scaleness, there is a growing subsection of designers that are challenging the traditional idea of design as a practice of producing mass-market products, consumer-oriented services, and world-scale information platforms, and they are pushing design's boundaries to consider higher-level design intended to move beyond its fixation with products, information and services, and target the more pressing problems humankind is facing. This corresponds to a growing population of practitioners in social design, design for social innovation, transdisciplinary design, sustainable design, transition design, etc.

Despite their well-intentioned nature, these sub-practices of design, unless explicit about their politics, achieve very little of the change they are committed to. Nicholas Negroponte's One Laptop per Child project, Project H's redesign of the Hippo Roller, the hundreds of Play Pumps left to decay all over the African continent, etc., all these solutions ideated in the Global North for problems specific to the Global South have failed to fulfill their promise of solving whatever problem these initially sought out to address (Bonsiepe, 1977; for critiques on the Play Pumps see Borland, 2011; Chambers, 2009; for discussion around the Hippo Roller, see Nussbaum, 2010). What these examples evidence is how even as design focuses its attention toward social change; it can not detach itself from the apolitical, problem-solving, innovation-oriented practice that has characterized design since the twentieth century.

If we take design thinking¹, which is currently positioned as design's flagship method for solving problems with a human-centered approach, we can start uncovering the ways design is actually perpetuating the problems it seeks to solve. Design thinking has established itself as the foremost problem-solving method committed to change through innovation by a loosely-structured, non-lineal, iterative process with a managerialist discourse suited for business schools (Kimbell, 2011). Design thinking has found adherents all over the world who believe that using the human-centered framework is an appropriate method for social change, from transnational organizations seeking organizational change to NGOs supporting humanitarian design. Yet, the issue with design thinking's de-politicized nature is mostly left unturned. Framing social design as a problem-solving practice without consideration of the politics of doing design is a definite way of complicitly using design in perpetuating the social and environmental issues that have shaped life on earth since modernity. Design Thinking in its promise of bringing change through innovation is aiding

¹Design thinking, as the sort of IDEO, Stanford d.school's kind of design thinking (see Brown 2009), as opposed to the term design thinking that can be used to describe designerly ways of thinking (Cross, 1982).

design's universal discourse of problem-solving while obscuring context and historical specificity of the problems it seeks to solve.

It is worth understanding what I mean by innovation at this point. According to Spinoza, Flores, and Dreyfus (1997) there are mostly two ways for thinking about innovation, the first being business-oriented; innovation at the service of producing new market-based values and corporate benefit; the second one, deals with innovation at the service of producing cultural change by a relocation or coordination of resources to provide the greatest social benefit. Too often designers align with the former version of innovation, and frameworks such as design thinking have normalized the business-oriented innovation model as the only means of change. This is consistent with the neoliberal paradigm we find ourselves immersed in, which seeks to commodify every human activity, including social change for good. It is establishing itself as a practice that converts social problems into opportunities; finding ways to monetize from human and environmental crises.

NGOs and governments have turned their attention towards innovation in order to mitigate crisis as opposed to creating actions that target structural reshaping that allows for transformative change. In the past years, this became public and noticeable with the repeated calls for European-based designers and innovators to generate solutions for Europe's refugee crisis. Most of these calls operated under the form of contests with corporate sponsorships such as IKEA or UN support and were all intended to mitigate Europe's burden and manage relocated Syrian and North African refugees, but none of these calls for social change were centered or framed in the context of Syria or the North African countries. These design for social innovation contests can evidence how the "[a]pplication of Western expertise and technology to solve the problems of development privileges outsider, technological, and often commercial solutions over political action or indigenous practice. In this way, humanitarian design constitutes a continuation of modernist development interventions and also shows their current embrace by global market forces." (Escobar 2018)

The widespread and uncritical use of design thinking is rendering the definition of design exclusive to problem-solving activities that fit into managerialist frameworks. This is highly problematic for a number of reasons, first it commodifies design even in its attempt to frame itself in the context of social change, and as Lucy Kimbell notes, "concern with design's place in the world and thus with larger social or political questions is lost when design is mobilized within a managerialist framework." (Kimbell 2011, 293). Despite design thinking's rendering of design practice as apolitical, all design is political, as it creates or denies possibilities of action and it generates materialities that inevitably shape and shift human practices to serve certain interests. While these interests have often been established by those who control mass-production markets, in the

case of social design, it serves the interests of those who seek out change for the greater good. In seeking out the greater good, there are usually political and economic agendas tied to this idea of change, yet design is more often than not, not transparent about the political motivations and agenda that are funding design for social innovation. As a method in itself, design thinking intentionally de-politicizes design by an oversimplification of complexity through the removal of context, relations, and historical specificity.

Design methods developed in the past years following the design thinking model are often used and replicated uncritically to address a number of very heterogeneous and culturally specific problems. As Yoko Akama notices, this is problematic in the space of social design because

"[w]hen design enters this space through widely popular methods like the Double Diamond or HumanCentered Design (HCD) toolkits, it often carries legacies of its industrialized, Eurocentric origins. These origins emphasize problem-solving, replicable methods and outcomes, pursue simplicity and efficiency, and detach knowledge, people, and relationality from the sites of design's embodiment. This risks perpetuating acts of colonialism, inadvertently displacing Indigenous practices, knowledges, and world views." (Akama et al, 2019).

These HCD toolkits are developed and based on the idea of a normative human (informed by design's Anglo-European, male historical legacy) and renders invisible other kinds of humans. Although, HCD is a method that allows designers to put users' motivations, needs, and values as the main drivers for design, it fails to acknowledge that there are no methods that account for an understanding that cultural and cosmological difference might generate motivations, needs, and values that are incommensurable to the designer's own experience. And so, why would social designers, that usually operate from a position of privilege and seek to use design to change the conditions of those in the margins, use design thinking to deal with social problems? Social design has established itself as a practice grounded in design (and not so much on the social), and therefore, borrows a lot of design's uncritical, de-politicized mentality from its days focused on mass-market production. It is through this grounding in design that it applies methods that seek out to effectively negate complexity, uncertainty, and ambiguity; all of which have been spaces of reflection left exclusively to the study of social sciences.

Through revealing the limitations of design methods, as they have been developed by design thinking, I can start to identify the limitations of my own designed deck of cards. Without acknowledging it, I was replicating methods that made sense in the context of Design Thinking but lost value once removed from the Anglo-Eurocentric context, I was replicating a US-based workshop

model, to gather experiences and knowledges from other kinds of subjects that fall out of the normative human, in the HCD framework. In the same sense that I needed to expand on the traditional design definition and concept, this workshop revealed the need to also expand in terms of the design research methods used.

The following sections of this chapter are a revision of methodological approaches that emerge from other ways of thinking and viewing the social, the purpose of this is to attempt to bridge the disconnect between design and the social. I will introduce some positions assumed by researchers in social sciences and humanities that aim to recognize issues of cultural difference, which I believe are lacking within design practice and design research.

3.3 DESIGN RESEARCH IN THE MARGINS

RESEARCHING THE OUTSIDE

The proliferation of other kinds of borders, these diffused bordering designs, whether exerted through cultural, material, or bureaucratic practices, are quite successful in ordering and controlling populations because most of the time they go unaccounted for. They trickle down entire systems, they become verbalized in the form of microaggressions, they exclude based on assumptions by policymakers, they appropriate artifacts that were intended for other purposes, etc. The forms in which these materialize are fluid and dynamic, and like most forms of oppression, they are situated and relational. Therefore, any understanding of bordering designs must be also situated and relational, and I argue in this thesis that it should be based on the experience of those who have been bordered, undocumented Nicaraguan women.

While the use of design methods might be advantageous in this case, as these methods usually privilege experience over objective and disembodied knowledge, they tend to privilege certain kinds of experiences. This is not design's fault in itself; in general, it is symptomatic of how research practices in most fields of knowledge usually have been conducted, and in particular, it discloses design's baggage as a practice guided by Anglo-Eurocentric values. If research has historically been used to establish Western knowledge as hegemonic, the same can be said of design research: it has been used to establish Western ways of being as hegemonic and imposed on the rest of the world. As Tuhiwai Smith (2001) puts it "research is one of the ways in which the underlying code of imperialism and colonialism is both regulated and realized. It is regulated through the formal rules of individual scholarly disciplines and scientific paradigms, and the institutions that support them." (p.8)

If the aim of this dissertation is to use the lived experience of undocumented Nicaraguan women in Costa Rica to understand how design generates, maintains and perpetuates a condition of undocumentedness for these women, why should we use methods that were developed by the White, male and Western gaze—to understand and validate their own experiences— to understand other experience(s)? It seems that if we approach this research using these methods uncritically the end product of this research itself will become part of the design repertoire that sustains the condition of exclusion for these women as it will privilege a certain kind of knowledge over the one it's trying to uncover. This leads us to ask how can design research methods deviate from the White, Male, Western gaze?

The implicit and explicit complexities found in the entanglement of sociotechnical systems, such as cultural differences, power relationships, and the colonial history of this particular subject are some of the things that design research (as it has traditionally been done) would fail to properly acknowledge. If we think about research as a situated practice, dealing in a context such a Central America, we find that design research, as a practice that was established in a cultural and geopolitical context so foreign to the Central American region is simply not equipped to understanding and making sense of the local context and historical relationships that create the conditions experienced by undocumented Nicaraguan women. Design research methods, particularly those that have universal claims and aspirations, are often successful at removing context and complexity, as this is the only way these can uphold their universal nature. It is only through this removal and denial of context and historical specificity that methods can be implemented universally and, by doing so, these methods erase anything that falls out of the universal discourse, or flattens difference by using a universal lens. When dealing with other kinds of knowledge that emerge from the experience of other kinds of subjects, it seems that design is lacking methods that allow for these other forms of knowledge to emerge and be articulated.

As Strega and Brown (2015) note "methods are not passive strategies but influence how we interpret our findings and how we construct representations" (p.7). Social research—from where design research takes some of the most appropriate methods for this particular kind of research—as a practice of knowledge production has a long colonial history; it was (and still is) used to validate Western knowledge as objective and disembodied and therefore it privileges the expertise of the researcher, who is presumably Western or produces knowledge based on Western canons of truth, over the expertise of communities that are seen as objects of study (Strega and Brown, 2015). This brings us once more to the same question of how to carry out research that privileges other knowledges (those that fall out of established Anglo-Eurocentric values and beliefs)?

The problem with epistemological and ontological privileging is not exclusive to design, yet other fields of research have done a more explicit (and better) job at addressing this bias; design research could benefit from these reflections. Whilst the political is often negated and undermined in design practices; critical race theorists (hook, 1981; Delgado & Stefancic, 2017), feminist theorists (Butler, 1990; Haraway, 1998; Anzaldúa, 1987; Ahmed, 2006), Latin American decolonial theorists (de Sousa Santos, 2014; Mignolo, 2000; Escobar, 1998; Rivera Cusicanqui 2018), postcolonial theorists (Spivak, 2008; Dabashi, 2015), indigenous theorists (Tuhiwai Smith, 2012), among others actively acknowledge and problematize the political nature of knowledge production and validation.

OTHER KNOWLEDGES

In order to critically rethink the kinds of methods appropriate to higherlevel design practice there must be a careful reassessment of what counts as knowledge. This is actually part of the same process of problematizing the universal in design. Knowledge is usually thought in positivist terms, it is objective, disembodied, it can be measured using quantitative tools, it is generated by applying some form of the scientific method, it is produced in the context of long-standing institutions such as academia, it relies on a shared scientific ('universal') language, and it is usually validated by peer-review processes. Any kind of knowledge that falls out of this process of objective knowledge production is usually regarded as epistemologically inferior. Scholars and communities that are operating in the peripheries or outside of the scope of these knowledge-producing institutions are actively contesting the idea of experimental knowledge being superior to experiential knowledge (Potts and Brown, 2015), the epistemological superiority of the objective over the subjective, the dominance of the centers of knowledge production over the peripheries.

Objective, positivist thinking is based on the idea that there is a universal Truth somehow out there present in the universe waiting to be found and measured. On the other hand, epistemological regimes that come from the idea that knowledge is actually socially constructed force us to recognize that there are many truths. Knowledge cannot point to any fundamental truth, claims of truth are produced as a consequence of the relations of the many actors that take part in the construction of knowledge (Butler 2004). Truths are not found, but constantly created; they are constructed in the making of meanings, in the interpretations of the environment, in the socio-historical relationships, there is not ONE truth, but there are many entangled truths that make social reality so complex it remains multiple, uncertain, unresolved, wicked (to put it in designerly terms). Social reality is unresolved because these many truths are in constant contradiction, they are ambiguous, they conflict with each other,

they are fluid in their co-existence.

But not all knowledges are regarded as equal and so the co-existing of many truths is often flattened by the imposition and dominion of Western thought over other epistemes. The unresolvedness of social reality is then forced to resolution by the imposition of whatever is regarded as the "Truth". Mignolo (2000) refers to this as "epistemological colonialization", which is the process of continual colonization used by the West by means of knowledge production supported by modern institutions to establish the dominion of the Western objective thinking over other knowledges coming from non-White, Male, Western bodies and spaces. Knowledge is neither neutral nor apolitical, it always serves the interests of those who produce and transfer it. Any research project that seeks to articulate experiences of otherness must be aware of the political nature of conducting research, as well as power relationships present in and through the research process, relationships that are vestiges of past and current manifestations of colonial relationships.

Using the lived circumstances and everyday experiences of undocumented Nicaraguan women in Costa Rica to recognize design's role in creating and being complicit in the perpetuation of the undocumented condition requires us to think about the politics involved in research and knowledge production. The experience of these women is the experience of subjects located in the margins, the exteriority, the periphery, the outliers. This forces us to think about how to conduct research that is capable of privileging knowledge that is produced by inhabiting the margins without resorting to translation and interpretation that renders the knowledge comprehensible under Western canons and standards of rationality and disembodiment. Any attempt to conduct research without considering this will only establish the research as a kind of bordering practice in itself. In an interesting way, this reveals how ingrained and inconspicuous this idea of (b)order is and the lengths to which it has permeated and operates in classifying knowledge: knowledge from the inside and knowledge from the outside.

The acknowledgement that there are different kinds of knowledge (inside/outside) is something decolonial and feminist scholars have argued when considering that the production of knowledge is a situated practice and that it's determined by the geo-politics—the where knowledge is produced—, and body-politics—who is producing knowledge (Mignolo, 2009; Haraway, 1998; Butler, 1990). There is an intrinsic relationship between racism and epistemology that displaces racialized experiences as subaltern knowledges. This research, in particular, argues for a decolonial option of producing knowledge, it seeks to articulate knowledge from the margins, or "border thinking" (Mignolo, 2000; Mignolo and Tlostanova, 2006) that is "the epistemology of the exteriority" (Mignolo and Tlostanova, 2006, p.207). This research seeks to uncover modes of

knowledge production that results from the experience of "otherness"; which is generated and sustained by those who dwell in Anzaldúa's (1987) "borderlands". In this sense, by taking the experience of undocumented Nicaraguan women we are using an approach that allows us to look from the inside-out and not the other way around, which has been a common practice in the social sciences and humanities.

The political agenda of this research is to add to the growing body of knowledge that's emerging from the Global South. In this case South must not be understood as a geographical concept, in this case, it will not be used to identify territories located beneath the earth's equator, nor does it seek to replace terms as Third World countries, it will be used in accordance to de Sousa Santos (2016) definition: "a metaphor for the human suffering caused by capitalism and colonialism on the global level, as well as for the resistance to overcoming or minimising such suffering. It is, therefore, an anti-capitalist, anti-colonialist, anti-patriarchal, and anti-imperialist South. It is a South that also exists in the geographic North (Europe and North America), in the form of excluded, silenced and marginalised populations, such as undocumented immigrants, the unemployed, ethnic or religious minorities, and victims of sexism, homophobia, racism and islamophobia." (pp.18-19).

PERSONAS, NOT PR·SOW·NUHZ: THE LIMITS OF DESIGN RESEARCH METHODS

If design is to shift its gaze away from the Western ways of being and knowing, it is imperative to adopt other methodologies that allow for different epistemological and ontological articulations, other methods for knowledge production, and a careful reassessment of what counts as knowledge. More importantly, if design is to stake any claim in the work needed to transition the current state of the world to a better one, it needs to learn from methods that allow us to think about emancipation (de Souza Santos 2016) and autonomy (Escobar 2018). This requires a major change in the ethos of design, it requires us to move away from the problem-solving activity that is usually associated with the practice of design and actively consider design as a defuturing practice (Fry, 2009), that can generate significant problems for those in the margins. This is part of thinking critically about the practice of design and with this critical thinking I am forced to reverse the gaze, instead of asking How do migrants cope with the migrant condition?, I ask How has design contributed to creating and perpetuating the undocumented migrant condition? What reversing the gaze implies is that instead of recognizing the power of design—which is the assumption built into the design for innovation paradigm we are currently immersed in—, we are effectively trying to recognize how power is designed.

It is understandable that design lacks the methods to police itself, after all, it is not known as a practice that deals with unintended consequences, instead it uses the claim of unpredictability to deviate accountability. It's not until recently (in the face of imminent human extinction, in great part due to design's products and byproducts) that design is slowly unfolding an ethical awakening. This research is an effort to articulate how intended and unintended consequences of design exclude people from certain systems that are necessary for carrying out everyday life in a dignified manner, it is an analysis of how these designed processes of exclusion/inclusion generate (other) human conditions and how these exclusion generates particular design practices informed by other logics.

This dissertation situates design research as a part of what Boaventura de Sousa Santos' (2016) "'epistemologies from the South': a crucial epistemological transformation [that] is required in order to reinvent social emancipation on a global scale. These evoke plural forms of emancipation not simply based on a Western understanding of the world" (p.18). This is why the theoretical basis used for this dissertation relies mostly on scholars producing knowledge from the margins such as feminists, indigenous scholars, scholars from the Global South that are contesting the idea of objective, disembodied, rational knowledge as superior than knowledge emerging from living in the margins. Most of the theory explored in this section starts with the claim that there should not be any ontological and epistemological separation in the knowing: there is knowing in the being. This is many ways aligned with the phenomenological nature of design studies that seeks to understand the experiential aspects of beingin-the-world (Fry, 2009; Dilnot, 2015); except that most of design's knowledge production has failed to acknowledge that in a post-colonial world racialized, gendered, disabled, and other bodies produce other knowledges- that are often not recognized by design— about the human condition.

Actively putting power under scrutiny can disclose the ways exclusion is enacted by design from the perspective of those who have been excluded. Processes and experiences of exclusion are contextual, therefore the analysis of these should be grounded in the experience of those who have participated in these processes. In this particular case, the experience is *of the bordered*, of those dwelling in Anzaldúa's borderlands, that "(...) vague and undetermined place created by the emotional residue of an unnatural boundary" ([1987] 2012, p.25). Nicaraguan women not only navigate the borders that have been imposed such as ir/regular, in/formal, il/legal conditions, but they also experience other kinds of borders: gender, social-economical, race and colonial borders. The lived experience of these women is intrinsic to their bodies, therefore, this research aims to explore the "body-politics of knowledge" (Fanon, 1967; Anzaldúa, [1987] 2012) resulting from the reflexion of inhabiting the border.

Sara Ahmed's (2006) phenomenological analysis that situates the body as the

determinant of knowledge production, offers us the possibility of framing everyday life experience of undocumented Nicaraguan women as sites of knowledge production. Inhabiting a body that has been shaped by exclusion (through undocumentedness) produces a different way of relating to the world:

"The body provides us with a perspective: the body is "here" as a point from which we begin, and from which the world unfolds, as being both more or less over there. The "here" of the body does not simply refer to the body, but to "where" the body dwells. The "here" of bodily dwelling is thus what takes the body outside of itself, as it is affected and shaped by its surroundings: the skin that seems to contain the body is also where the atmosphere creates an impression; just think of goose bumps, textures on the skin surface, as body traces of the coldness of the air. Bodies may become oriented in this responsiveness to the world around them, given this capacity to be affected. In turn, given the history of such responses, which accumulate as impressions on skin, bodies do not dwell in spaces that are exterior but rather are shaped by their dwellings and take shape by dwelling". (Ahmed 2006: 8-9)

The body of Nicaraguan women is shaped by their undocumentedness, the conditions in which they live, the kilometers they walk to get to work, the stairwells they must use to navigate the broken terrain in which they have built their houses, the ways relate to one another, how they raise their children, how they take care of their health and bodies, the food they eat; all of these everyday practices are conditioned and are generated as a result of their undocumentedness (Chapter 4 and 5 will expand on these practices).

Situating the body as a determinant of experience in critical theory can be frequently found in feminist studies. Tlostanova, et. al. (2016) states that the intersection of decolonial theory and feminism allows us to start understanding processes of erasure based on the body: "At work here is the 'coloniality of knowledge', an epistemic regime of modernity that subsumes all models of cognition and interpretation of the world to the norms created and imposed by Western modernity and offered to humankind as universal, delocalised and disembodied. Decolonising knowledge means destabilising the subject-object relationship from the position of those who have been denied subjectivity and rationality, and undermining the very grounds of the epistemic matrix of modernity." (p. 214)

The politics of knowledge, understood as the result of an embodied experience that allows us the privilege of partial knowledge based on one's circumstances in relation to the world is a common concern among feminist theorists. Haraway (1988) refers to this as situated knowledges: "politics and epistemologies of

location, positioning, and situating, where partiality and not universality is the condition of being heard to make rational knowledge claims. These are claims on people's lives. I am arguing for the view from a body, always complex, contradictory, structuring, and structured body, versus the view from above, from nowhere, from simplicity." (p.589). Locations and points from which knowledge is produced is how feminist scholarship privileges the specific and contextual over the general and universal; it can be used the understand the personal experience over general assumptions of entire populations. Situated knowledge also allows for an understanding of knowledge that emerges from the relations with the world, it does not consider subjects as removed from the environment, but considers that subjective identities are a product of the relationship with the environment.

In particular, my methodology brings intersectional and third-wave feminism into the practice of design research, as it challenges traditional 'binaries' and allows us to recognize how a body can occupy multiple social identity locations at once such as gender, sexual orientation, racialization, postcolonial to recognize how oppression manifests intersectionally and as a product of different and diverging identities. Conceptualizing oppression in an intersectional nature (Crenshaw, 1991) enables us the possibility of understanding how power operates on an individual basis without losing sight of socio-historical forces that shape collective experiences of oppression.

THE MARGINS AS SITES OF POWER

Generally speaking, women have been in the margins or outside of knowledge-producing processes, intersectional feminism problematizes that this absence is especially perceivable for women of color, LGBTQ populations and women with disabilities, and while problematizing this intentional omission, feminists have reclaimed the margins as a site of power. Author, feminist and critical race scholar bell hooks (1989) reveals this by recounting her personal experience as a woman of color living in the United States of America:

"To be in the margin is to be part of the whole but outside the main body. As black Americans living in a small Kentucky town, the railroad tracks were a daily reminder of our marginality. Across those tracks were paved streets, stores we could not enter, restaurants we could not eat in, and people we could not look directly in the face. Across those tracks was a world we could work in as maids, as janitors, as prostitutes, as long as it was in a service capacity. We could enter that world but we could not live there. We had always to return to the margin, to cross the tracks, to shacks and abandoned houses on the edge of town. There were laws to ensure our return. To not return was to risk being punished. Living as we did -on the edge- we developed a particular

way of seeing reality. We looked both from the outside in and from the inside out. We focused our attention on the centre as well as on the margin. We understood both. This mode of seeing reminded us of the existence of a whole universe, a main body made up of both margin and centre. Our survival depended on an ongoing public awareness of the separation between margin and centre and an ongoing private acknowledgement that we were a necessary part of that whole. This sense of wholeness, impressed upon our consciousness by the structure of our daily lives, provided us with an oppositional world view - a mode of seeing unknown to most of our oppressors, that sustained us, aided us in our struggle to transcend poverty and despair, strengthened our sense of self and our solidarity." (p.20)

This long quote illustrates how scholars in critical race theory, gender studies, post-colonial studies regard the margin as a site of power, where it is possible to disclose other worlds. In the same way hooks uses the railroads to physically and materially denote the border between inside/outside, this research will attempt to use material evidence of those kinds of inclusion/exclusion borders in Chapter 4 and 5: the ID card, la cuesta of Calle Los Mangos, the work permit, the water tank, etc. The margin is often regarded by dominant narratives produced by research that serves the hegemonic worldview as empty spaces or spaces of transition in which people are constantly looking to escape from, but hook's view of the margins is centered on articulation a world in itself, a world that generates specific spatial and social practices, practices and designs of contestation. These is what I intend to convey in this research by using the experience of undocumented women that inhabit Río Azul, a marginal urban neighborhood, built around a former landfill in the outskirts of San José.

hooks' previous description of everyday life also allows me to introduce the concept of articulation as a method. According to Stuart Hall (1980), an articulation is:

"the form of the connection that can make a unity of two different elements, under certain conditions. It is a linkage which is not necessary, determined, absolute and essential for all time. You have to ask, under what circumstances can a connection be forged or made? The so-called 'unity' of a discourse is really the articulation of different, distinct elements which can be rearticulated in different ways because they have no necessary 'belongingness'. The 'unity' which matters is a linkage between the articulated discourse and the social forces with which it can, under certain historical conditions, but need not necessarily, be connected." (p.53)

Research in the field of cultural studies uses the politics of articulation to

understand how power is constructed. "Through the disarticulation and rearticulation of relations" (Grossberg 2010, 24) it is possible to identify these dynamic power relations that materialize in conditions such as the undocumented one. These relations include (but are not exclusive to) culture, politics, legislation, society, everyday life, and others.

Articulation as method and theory is committed to complexity, contradiction, and ambiguity, it does not aspire reductionism (Grossberg, 2010); as we have seen before, design research is often quite reductionist by narrowing the problem-space to provide actionable solutions. Articulation, through a thorough study of context(s) is capable of becoming a transformative practice by pointing out the making, unmaking, and remaking of worlds. If design is to position itself as a practice capable "to change the material history and practices of our societies" (Tonkinwise, 2014, p.31), it requires methods that allow for an understanding of the context in which change needs to happen. Failing to do so will to continue to establish design as a practice that generates actions that sustain and perpetuate the construction of otherness, and therefore, any practice of design that's committed to change, social and/or environmental, must recognize that "change is never well served by reducing complexity to simplicity" (Grossberg, 2010, p.17).

Until recently, design has been somewhat absent in these analyses of how power is exerted and materialized; but in situating the artifactual relations in these articulations it is possible to start recognizing the connections forged or made by design in relation to context and historical conditions. The field of science and technology studies (STS) uses human and non-human actors to see and understand relationships between the human, "the natural" (as defined by humans) and "the artificial". Donna Haraway (2004) uses articulations between human and non-human actors to understand how the linking and delinking between these actants are what make up social relationships "(...) the world has always been in the middle of things, in unruly and practical conversation, full of action and structure by a startling array of actants and of networking and unequal collectives" (p.304). Social relationships are always in transition, provisional, waiting for new links to emerge and to replace existing linkages, the relations are made and remade through the appearance of other actants.

In this research, I will use articulation in a manner similar to how Mahmoud Keshavarz (2016) uses articulation as a theory and method to situate the design politics of the passport in his thorough analysis of artifacts, sites, and spaces that create the conditions of undocumentedness. Keshavarz uses articulation to situate artifacts and artifactual relations, specifically the passport, in the production of context and power. Through the study of material articulations, Keshavarz is able to conceptualize design and the designed in terms of creating linkages that disconnect and reconnect conditions in everyday life:

"Articulation is a way to situate design within an articulated world and to trace the disconnections it makes and connections that it forges. Design, then – or more accurately, the act of designing – is understood in this work as an articulatory practice that articulates both the material artefacts (...) as well as the relations between various artefacts, sites, and spaces that operate within the conditions of undocumentedness that are produced and sustained by it. This is to argue that the ontological condition of design is always about practices of articulations." (p.44).

In this research, articulation will be used as a method to analyze the experiences of undocumented Nicaraguan women in order to recognize how design generates and/or disables material possibilities of action for these women.

3.4 A SITUATED DESIGN RESEARCH PRACTICE

A CENTRAL AMERICAN ORIENTATION: DESIGN SOMEWHERE IN THE MIDDLE

Although there is a growing body of scholarship that focuses its attention to design practices coming from the Global South (Akama and Yee, 2016; Fry, 2017; Butoylia, 2018; Ansari, 2019), and there is also a growing number of designers based in Latin America that are bring design to social and environmental issues (Escobar, 2018; Botero, 2013; Gutiérrez Borrero, 2014); design scholarship coming from Central America is basically nonexistent. Generally speaking, Central America has historically been in the margins of the geopolitics of knowledge production, of any kind of knowledge production. It is a region that seems suspended between the massive gravitational force generated between Mexican and South American culture, not belonging to either bloc. With an area of 521,876 km2 and a population of about 50 million people, it would be impossible to make the claim that there is no knowledge production on account of the size and population of the region. It is an area larger and more populated than Spain, but given the colonial relationship between the two, knowledge produced in Spain is often imported as legitimate and valid consolidating longstanding colonial relationships that shape the current geopolitics of knowledge production.

Designers operating from the Global North-logic of design that wish to carry out design in the Global South need to unlearn (universal) design practices and relearn contextual design practices, this was clearly evidenced in my attempt to conduct the previously discussed card workshop. Conducting workshop-based research in an area such as Río Azul, a marginal urban neighborhood made up mostly of informal dwellings erected in the site of a shut down landfill, fails

to convey the contextual complexity of everyday life for subjects that face a multitude of exclusions (state, economic, social and cultural).

As my dissertation deals with a social issue that is regional in nature, it is important to contextualize the issues in Central America that are pushing and displacing thousands of individuals across the American region. In the past years, Central America has been in the spotlight due to the so-called 'Central American migrant crisis' in which there has been a massive exodus from the region to countries in the North, mostly the United States. This situation reveals how the specific geopolitical, economical, social, and cultural circumstances of the Northern Triangle of Central America have conflated to create the conditions for the unprecedented emergence of massive migrant caravans; of thousands of migrants from El Salvador, Honduras and Guatemala flooding into the North American countries, changing the political landscape of the United States by polarizing political speech that materializes in detention camps and securitization of the border. The reasons that are pushing out and displacing people from the Northern Triangle are historical, migrants are fleeing from endemic violence, structural poverty, and the emerging threat of climate change. Some of these motives are shared by Nicaraguan migrants, who instead of moving North, decide to head down to Costa Rica, a decision shaped by historical factors that have established a constant flow of migrants from Nicaragua to Costa Rica.

The current volatility and complexity of the region is a product of a plethora of internal and external factors that have geographic and historical specificity. It is the product of Spanish and British colonial history; of the United States imperialist interests and its war against socialism; of flows of drugs and weapons; of paths of hurricanes; of traversing fault lines; of active volcanoes; of the fragility of its ecosystems; of the hundreds murders with impunity of environmental and indigenous activist; of the more than fifty indigenous languages spoken (most of these facing epistemic extinction); of its threatened coastlines; of decades of civil war; of years of imposed dictatorships; of the foreign economic interests over millions of acres covered with bananas; it is the point where the Pacific meets the Atlantic and the North meets the South and yet it's neither here nor there, it is always in the middle. Central America must not be seen as a cohesive place, it is highly fractured and fragmented due to its colonial history and the geopolitics of its unique location. All of these particularities dictated by its geographic and historical specificity must be kept in mind when doing any kind of research in the region, in particular when accounting for issues of regional migration, as is the case with this thesis.

What might be perceived as a gap of design literature and case studies in the Central American region must not be read as a reflection of the gap in design and designing practices in the area. As in most parts of the Global South, practices

that could align with what is considered to fall under design's domain are not identified as such—this is the case with Jugaad practices in India (Butoylia, 2018), rasquachismo among Chicano populations or design operating under the logic of el buen vivir in South American countries (Gutiérrez Borrero, 2015). Practices that are an intrinsic part to carrying out everyday life in Central America -practices of (re)creating material possibilities, of (re)configuring existing conditions to shape, adapt, and create new worlds and ways of being—operate in the same logic as design even if they have not been validated by design scholarship or if they are carried out under conditions different than those associated with design—as defined by the Global North. In the same manner that design-like practices are carried out based on the possibilities afforded by context, design research demands the same contextual consideration. This is an opportunity to rethink the ways in which we frame social issues in the context of social design. It allows us to step away from the innovation-centered approach in social design, and open possibilities to focus on other forms of carrying out social design.

LANGUAGE MATTERS: BEYOND THE *SPANGLISH* UNDERSTANDING OF DESIGN

Design-based and design-used language relies almost exclusively on the English language. It is possible to think about the imposition of design language as part of design's anglo-centric universalizing program. It is a form of epistemic erasure, as the imposition of a foreign language negates the possibility of uncovering context-based language needed for thinking about other forms or kinds of design. This is not to be read as there is a lack of language used to describe other practices of design happening outside of the Anglo-European centers, there are in fact many terms and many languages that have not gained design's recognition or validation (which can be seen as a good thing given mainstream design's tendency for cultural appropriation).

The lack of non-English design language brings epistemological and ontological considerations to the practice of design. Epistemologically, it narrows the understanding of what design is exclusive to those that operate in English; design theory is being produced in English and it's being consumed in English. Academic centers around the world reproduce this language hegemony (Bennett, 2007), and although this might be true in all academic spheres, design is not only failing to communicate beyond the Anglo-proficient populations, it's expecting these Anglo-terms to permeate the local culture of designers. A good example of this is precisely the pervasiveness of design thinking around the globe and yet it is known exclusively as "design thinking" everywhere. This imposition negates the possibility of context-based language to emerge and expand the ways we think about other forms of design. This is an issue that designers not working in anglo-proficient communities need to look into

because the ways we think about design, condition the ways we practice design. If there is a lack of context-appropriate language, the practice of contextual design will not be fulfilled.

Ontologically, language matters because we use language for sense-making; as Winograd and Flores (1986) put it "language (...) is no longer merely a reflective but rather a constitutive medium. We create and give meaning to the world we live in and share with others. To put the point in a more radical form, we design ourselves (and the social and technological networks in which our lives have meaning) in language" (p. 78). Language is the first technology we have to make sense of the ways we think about the world, therefore, if we are trying to understand other worlds by use of foreign languages, we are flattening difference through language and forcing those worlds to fit into the ways that a foreign language afford us to understand it.

The problem of language is an issue that needs to be discussed beyond the possibilities of mere translation. It is not solved by taking the Anglo-bodies of design literature and making it available in other languages. It is an issue that takes us back to thinking about the geopolitics of knowledge production. The current mainstream definitions of design cater mostly to an Anglo-Eurocentric worldview, these are then exported (sometimes by use of translation) and impose this idea or concept of design from the Global North to the rest of the world. This is aiding the (re)production of the underdevelopment discourse, as the Global South is oftentimes unable to carry out these practices of design that require specific material possibilities that are not found or replicable in most places of the Global South. Not only there is an impossibility of reproducing this idea of design, but there should also be active questioning whether or not this preconception of what design is is the best way of dealing with issues with grounded historic specificity. The current language of design negates the possibility of thinking about other forms of design that are grounded in other worldviews. Other ways of design need other terms and specific language to make sense of these ways and their contextual emergence.

The absence of design-language beyond the Anglo understanding of design renders especially problematic in the field of social design, on top of adding further considerations to the ongoing conversation of social design's imperialist nature, it is prescribing a kind of design intended to solve many problems. Most often social design begins the design process by bringing in the people with whom they are designing with— and, although, the designing for model is still uncritically operating in the field—, designers are making a conscious effort to bridge the distance between them and the communities by renouncing the idea that the designer is the actor with most agency when it comes to generating change. For this, designers rely on ethnographic, observation-based, participatory methods, and community workshops to bring in community

members and other stakeholders actively into the design process.

Any method involving observation, interpretation or participation needs a shared language to operate and be performed, and yet the issue of language is rarely discussed. Again the issue here is not an issue of translation, but one of cultural interlocution. A designer that seeks to understand the experience of anyone being-in-the-world needs awareness of how language is used to disclose those worlds. Winograd and Flores (1986) believe that language is crucial in creating worlds, individual identity does not emerge from these worlds, but it is shaped by the individual's interpretation of the world and it is created by the use of language. "Any individual, in understanding his or her world, is continually involved in activities of interpretation. That interpretation is based on prejudice (or pre-understanding), which includes assumptions implicit in the language that the person uses (Ibid, p. 29).

In Designs for the Pluriverse, Escobar (2018) also deals with the issue of language and interpretation as it relates to design "(...) key aspect of design is the creation through language of the domains in which people's actions are generated and interpreted" (p. 115). If design is to start a more inclusive project, where many worlds shaped by many different subjectivities are able to co-exist there is an imperative to develop context-based design languages that emerge from the communities in which designers are working. Any designer engaged in social research must be wary of imposing design's Anglo-Eurocentric terminology as it is imposing more than just language, it is an ideological imposition that seeks out to flatten cultural difference. This calls for an awareness by designers to recognize their subjective position within the system in which they are conducting research, "that the observer is not separate from the world she or he observes but rather creates the phenomenal domains within which she or he acts; the world is created through language (again, language is not a mere translation or representation of reality "out there" but is constitutive of such reality (...))" (p. 111).

The issue of language is one of especial attention when working with communities that are claiming their space in the margins. These groups— as a condition of their marginality—engage in bounding processes; these, though, are fundamentally different from bounding as it relates to nation-building processes (Anderson 1983; Castles, et al 2002). In these cases, and in particular, when dealing with migrants, these bounding processes are intended to preserve common cultural and identity practices. This bounding is performed through language; any individual that's outside of these groups probably does not have a common understanding of this language. This is why the issue of language is more complex than providing translated terminology because although Nicaraguans might speak the same language as in Costa Rica, the nuances of language that they use builds and sustains their community.

Designers that are taking experiences from the margins and trying to make sense of these by use of design language are doing a disservice to the communities they are working with, other worldviews and cosmologies need to be conveyed under the terms that sustain these values, beliefs, and relationships with the world and these are determined contextually and have historic specificity. Imposing design language is a form of erasure of these cultural differences, of forcing an Anglo-Eurocentric perspective to other human conditions. This presents a huge challenge by the part of the designer that is often disregarded, how can designers communicate other worldviews using the language of research and language that can be shared among other designers or even policymakers, public servants, or anyone that is operating in the specific social problem-space?

3.5 DEVELOPING A CRITICALLY REFLECTIVE SOCIAL DESIGN STANCE

MY POSITION AS A DESIGN RESEARCHER

One of the biggest issues with not being able to delink design from problemsolving is that it seems to imply that the designer must, therefore, be a problemsolver. In dealing with change, it appears that the designer would be the actor that holds most agency in triggering the desired change, and, although this assumption in itself is problematic, it's even more problematic to think that even if this were true, there is a lack of mechanisms to hold designers accountable. In the field of social design, these implications, if left unquestioned, result in abusive relationships between the designer and those who are involved in the process of designing and in relationship with the designed. Social issues are approached as "solvable", disregarding their wickedness (Ritter & Webber, 1973), and neutralizing complexity and uncertainty, to override contradiction, to reject cultural difference, to refuse power relationships, and, overall to contribute to a culture of paternalism. Approaching design in this matter just contributes to the technocratic nature that pushes the discipline to the solutionism-culture supported by design thinking methods. I propose that designers and design researchers should start shifting the How might we? questions towards more Why should we?. Such a move would force designers to be explicit about the politics of design, as well as their own.

I believe that in non Anglo-Eurocentric contexts the practice of design research must be rethought; exploring with other methodologies and other ways and temporalities of engagement in design research are necessary to use design in ways to generate emancipatory research at the service of social and environmental justice. Informed by the work of indigenous scholar Tuhiwai Smith (2012) and her analysis of twenty-five indigenous projects, I believe

social design can be used to serve projects that focus less on problem-solving and more on problem-reframing informed by the experience of those that are affected by the issue. These projects can focus and develop methods centered on claiming, testimonies, storytelling, celebrating survival, remembering, indigenizing, revitalizing and regenerating, connecting, representing, gendering, envisioning, reframing, restoring, returning, networking, naming, and protecting.

In the past years, social design has tried to move beyond the design's paternalist approach and has tried to recognize its politics (Manzini, 2015; Fry, 2009; Tonkinwise, 2014). It has explored issues of power within the practice itself and in the context where it is situating the practice, and now more than ever there is growing population of designers that are exploring the embedded politics of the history of design as it has and continues to aid global projects of colonialism, imperialism, fascism, etc. (see the work by the Decolonizing Design Collective).

The work done by these designers is trying to contest the de-politicized nature of design, making a call to ground design in the tradition of critical reflexivity that has characterized the humanities and social sciences. "In contrast to much contemporary design practice and education, social scientists are trained to question what theoretical, political, or other commitments they bring to their work and how these shape their research findings. Construed in this way, design thinking fails to reference wider theories of the social and misses opportunities to illuminate the context into which the designer is intervening." (Kimbell, 2011, p. 295)

Doing research in a critically reflective manner, as it has been proposed by feminists, requires the researcher to be explicit about her politics; there's no claim of objectivity, instead, it is a process of disclosing personal biases and fostering an awareness of how these influence one's interpretation of social research. The designer, therefore, becomes aware of the world she's occupying and the place she occupies in this world; what institutions (and the politics embedded) she is acting on behalf of (State, academia, industry, non-profit, humanitarian sector, etc); she practices self-reflexivity and is in constant dialogue with her own assumptions when trying to interpret the reality experienced by others. In particular design research, which deals with the experience of being-in-theworld, must be sensitive to the fact that doing research is a way of being-in-theworld, it is itself an embodied practice, shaped by the researcher's subjectivity and mediated by the world in which the researcher inhabits.

Being critically reflective forces me to look inward into my own experience and the place I occupy as a design researcher that has been trained in the context of US-based academia, it was my experience in the US academia that card-based workshops worked and this informed my decision to uncritically apply this method to a context that is completely different from the one I had

experience with. As a PhD student that is conducting research for an institution such as Carnegie Mellon University and that is getting paid and funded by the Universidad de Costa Rica.

Additionally, as a Costa Rican citizen I must recognize that the issue that I am trying to convey in this research is not an issue that I am affected by directly, I am not, nor I have ever been an undocumented migrant; I do not live in Río Azul, and I do not face the kind of structural family separation this women experience. I was once asked by one of the women

"¿Y usted qué gana con esto?" [What is in it for you?]

I believe she asked me the right question, although at the time I struggled with providing an adequate answer. What's at stake for me is a PhD degree. But through this PhD I have funding, institutional support from two universities and their platform to visibilize an issue and a population that has been historically overlooked. As a woman, I believe I have the possibility of accessing voices of other women that have been historically left out of knowledge production. This research is an effort to deviate from the male perspective of migration that too often is the main lens by which issues of migration are exposed. These are the reasons why this research is focused on their experience and everyday life.

INTERPRETATION

Researchers in the field of social design need to be aware of the context in which the social issue is embedded; this requires recognizing one's own situation within this context. The researcher is observing the system from within the system and has a specific vantage point, a unique perspective determined by the ways the researcher occupies the world (Maturana and Varela, 1987; Luhmann, 1995). The recognition of being-in-the-world implies that the researcher is mindful of the relation she has with other actors, both human and non-human. The objects and artifacts that are used during research, especially design research, which relies heavily on designed-objects (journey maps, cultural probes, etc.) inevitably mediates the ways the knowledge is interpreted by the researcher.

This leads us to the issue of interpretation, any understanding of research that values subjectivity over objectivity needs to recognize that any knowledge produced and information relayed during research has been interpreted. Shifting the idea of the designer as a problem-solver to a designer as an interlocutor (not a translator) might be an appropriate move to do in social design. Let's take a moment to consider the ways interpretation is an activity determined uniquely by the subjectivity of the designer. As I have mentioned before, every researcher or designer occupies a particular place in the world, this place is determined by the designer's embodied experience in the world, her subjectivity

which is constituted by her previous and existing relations with institutions, her values, her identity. All these conditions determine the researcher's unique positionality which allows her to do a reading of the system or issues she is researching. This reading is subjective as is it a product of the researcher's own subjectivity. Designers are not exempt from this, whether they recognize it or not. If design practice is configured by the designer's own theoretical and political commitments (Fry, 2009) and design research is part of the practice of design, we must consider that these political commitments shape the ways the designer makes sense of the world.

Design thinking (in this case, understood as what Cross (1993) refers to as 'designerly ways of knowing) has a legacy of considering the practice of design as a reflective practice (Schön, 1983). Schön uses the term reflexive to describe the ongoing dialogue the designer has with the materials in which she engages with. This conversation between the designer's actions and the materials is what gives the designer the capacity to reflect, drawing from previous experiences, about the specificity of the situation and materials in each process of designing. This idea of a designer as a reflective practitioner is particularly useful to describe practices of 'research through design' (Frayling, 1993). To describe the practice of researching in the domain of social design, I propose using a critical reflective practice—consistent with the feminist tradition of research, where the researcher is undergoing a process of constantly disclosing and reflecting on her assumptions and there is an ongoing consideration of what factors (internal and external) influence her perceptions during the different stages of research. Critical reflexivity forces the researcher to turn her gaze towards herself while also reflecting on the politics and ideologies present and embedded within the research process (Strega and Brown, 2015). This implies that there is an awareness of the unfolding power relations throughout the process. This raises questions about the ethics and politics of participation.

In conjunction to the critically reflexive approach, I suggest that this kind of social design practice must be grounded in decolonial theory. Research as a practice of knowledge production has a long colonial history, it continues to be used to validate knowledge that aligns with Male-Western values as more 'truthful' than other kinds of knowledges, it's used to legitimize the Western-gaze that produces the interpretation that there are ways-of-being in the world that are more desirable than others. Social researchers must recognize this is a legacy embedded in the politics of doing research. Designers must recognize that the logic that's determined design's calling to serve the modern-universal is embedded in the politics design research and design practice. If designers fail to acknowledge this, they become complicit in the spreading of 'epistemological colonialism' (Mignolo, 2000).

A CRITICALLY REFLECTIVE SOCIAL DESIGN STANCE

All of the previous considerations are intended to build a case for considering other forms of design that offer the possibility of asking other questions within design. Questions regarding ways-of-being that emerge from the relations between human and non-human actors, of experiences that are contextual to spaces that are so different from the Anglo-Eurocentric canon. How might we reverse the gaze in order to understand the ways design has been complicit in creating marginal spaces where humans inhabit and reproduce their everyday lives? What kinds of methods can be used to disclose these marginal worlds? and in doing so, can it help reclaim these sites as sites of power? These kinds of questions are not new, they have been asked repeatedly by social researchers, yet I believe that there is value in asking these kinds of questions from the design perspective. Designers are complicit in perpetuating certain conditions of otherness, this might be intentional or not, but it stems from a lack of critically understanding how design generates or negates possibilities of action that (re)produce and sustain certain conditions. Design that deals with the human condition and the ontological concern of what it means to be in the world needs to understand other human conditions, those that by design have been forced to inhabit the margins.

I believe that these questions should be asked within design as an effort to reverse the gaze and hold design accountable in the creation of conditions imposed and naturalized by the artificial, such as undocumentedness. Binaries such as regularity/irregularity, legality/illegality, documented/undocumented, inside/outside are sustained artificially by human actions that rely on material configurations that validate one condition over the other. These material configurations respond to a logic and generate the possibilities of material actions. What this research aims to do is to use the experience of Nicaraguan migrant women to visualize how these logics operate and the material conditions that are generated from these binaries.

Although research of this nature would fall into the social design field, it demands a different kind of social design as it is not seeking to solve the problems faced by these women, it seeks to offer different ways of thinking about this migrant condition in a specific context. I'm calling this approach to design, a critically reflective social design research (this must not be confused or mistaken with Dunne and Raby's (2013) critical design). It borrows the term critical from the critical paradigm of social sciences, meaning "[research] intended to be emancipatory, directed at redressing structural inequalities and transforming existing social relations (...) [research] intended to empower the marginalized and promote action against inequalities" (Strega, 2015, pp. 127-128). It refers to the social as it situates the research in the social realm to better understand (other) human conditions and the articulations between human

and non-human actors that generate these conditions. And it claims a stake in design as it looks at design from within design to recognize the ways these conditions are materialized by design—as in following certain logics and relying on materialities to enact and perform these conditions.

The term critically reflective social design does not seek to become a thing in itself, it encompasses a series of guidelines I expect to uphold throughout this thesis in order to establish a different kind of design practice from mainstream social design. Naming this practice is in itself a method of recognizing my own politics within design. In this particular research, this stance will be used in an effort to:

- Recognize that there is a need to develop better methods in design to make sense of (other) experiences
- Frame design practice as situated and embodied
- Use (other) knowledges to reclaim the margins as sites of power
- Central Americanize Western concepts such as design and design research
- Contest the modernist logic that renders design exclusive to problem-solving
- Recognize that the problem-solving nature of design has been complicit in sustaining conditions of otherness
- Understand the possibilities of action generated by relationships between human and non-human actors
- Consider the ethical implications and the politics of participation when conducting community-based research
- Depict power, not as a fixed entity, but recognizing how design has enabled its fluidity and dynamic operation
- Be truthful to the contradictions and complexity of (other) human conditions

This is my personal stance to research in design in an effort to generate a different form of knowledge production from within the practice of design. It is an attempt to find new ways of understanding social problems and responds to the fact that as stated by de Sousa Santos (2004) "we are facing modern problems for which there are no longer modern solutions." The modern and mainstream way of conducting design research is failing to solve the problems generated by modern ways of thinking, it is a crisis of particular world-making practices that emerge from the logic of modernity, which design has been

complicit in establishing. This is an attempt to propose other kinds of design research and that frame design within larger social issues.

3.6 RESEARCHING THE BORDERS: ENGAGING UNDOCUMENTED NICRAGUAN WOMEN IN RÍO AZUL

LEARNING FROM A FAILED DECK OF CARDS: APPLYING THESE PERSPECTIVES IN MY RESEARCH

As a result of my failed workshop, I decided against using traditional design research methods, and instead I resorted to ethnographic and anthropological-based research methods to gather personal accounts and the experiences of the women that I engaged with in the past years. These accounts, stories, observations, are interpreted and used to build the concepts of *bordering designs* in Chapters 4 and *contestation designs* in Chapter 5.

Previously, in Chapter 2, I introduced Yamil's story, a story that synthesizes a longer relationship with Yamil in which I was introduced to bits of Yamil's life story in each one of our interactions. With time, layers of detail emerged about his and his family's life. These details are necessary to make sense of the complexity of the undocumented condition many of these women and their family experience. It is through these kinds of interactions that I was able to get a sense of how everyday life practices are conditioned and informed by the undocumentedness of the Río Azul residents. For the past two years I have met Yamil and the women that are part of the Vínculos organization almost weekly in their Saturday afternoon meetings and through this relationship I was able to get an intimate view of their lives.

I initially developed a relationship with the group through volunteering, I provided graphic design assistance, and I helped with event organizing and other logistics. I would attend their meetings, and I would assume whatever role needed to be filled at the moment: helping with babysitting or coming up with activities for the children that the attendees brought along, serving food, helping to clean and pick up after the meetings, and coming up with design materials that they used in their meetings. My participation in the organization was often dedicated to background activities, which was always my aim. I do not believe this was an equal exchange in any way, I ultimately believe I gained more from this relationship than what they did. But I strived to always be clear and transparent about the intentions of my research and I tried to make myself useful whenever possible.

Throughout this process of field work, I would meet one-on-one and conduct loosely structured interviews with the women I met from these meetings in

their homes in Río Azul; I would walk with them to pick up their children from school, I found that sitting in their kitchens having a conversation over a cup of coffee and some *empanadas* proved to be much more insightful and meaningful than a workshop-setting. I tried to meet them on their ground, and after the failed cards I did not try to make them meet me on mine.

Throughout the two years I spent doing field research, I engaged with over 30 Nicaraguan women, I had recurring private conversations with 13 of them, I held 2 talleres comunitarios (a workshop format that is common in Latin America, that prompts collective and group conversation type of engagement), I attended to countless weekly meetings held by Vínculos. This kind of engagement provided me with detail of their lives and relations: where they lived, their family ties, their affective ties, their work relations, and their histories. I did this in order to focus on contextual geographies, understood as the landscape of articulations and the ontology of relations.

It is important to note that all the names of the women have been changed in order to ensure they remain unidentifiable as their undocumentedness and irregular migratory statuses already subjects them to a highly vulnerable position. The name of the organization that I collaborated with has also been changed in this dissertation to ensure that all the information remains unidentifiable. Although the bulk of the field work was in fact conducted in Río Azul de La Unión de Cartago and its surrounding neighborhoods, the name of the specific street where the organization is based and the site of my descriptions in Chapter 4 and Chapter 5, has also been changed. The nature of the information the participants shared with me is quite sensitive and some of their actions could be considered illegal, for this reason I have pseudonymized names and identifiers and I carefully chose what to disclose and what to withhold from their testimonies and the conversations we shared.

The stories, testimonies, and narratives that I will be woven into the following chapters, are the product of my own curation, interpretation, and inevitably my translation. All of the conversations were held in Spanish and I have transcribed fragments of these from my field notes to this dissertation and I have translated them trying to convey the intent and tone in which they were shared. These fragments of conversations and interactions are used to build the arguments throughout this dissertation and provide a critical foundation for the following chapters.

I have chosen and curated the fragments in a manner that these provide glimpses of key relations and points were it is possible to see articulations and ontological relations that evidence how design has been complicit in establishing power relations that create the condition of undocumentedness (bordering designs) and how these women design ways around this condition (contestation designs).

I consider this approach to research as part of a broader discussion led by design studies that focuses on the relations between design with culture and sociology by shifting from the visual perspective to a cultural one (Julier, 2008; Keshavarz, 2016; Fry, 2009; Dilnot 2015; Ansari 2019).

This dissertation is an attempt to shift the kind of design project away from the traditional humanitarian design approach that has led to many failed design projects or that has perpetuated the issues it seeks to solve. This research seeks to provide an approach that articulates power relationships and how these materialize in generating other human conditions.

CHAPTER 4. BORDERING DESIGNS

In this chapter of the dissertation, I will use narratives and insights from field research, in combination with a review of theoretical positions from critical border studies, critical geography studies, political theory and critical and cultural theory in order to place the border in everyday life. This is intended to start identifying how design has played a role in materializing and "naturalizing" the undocumented migrant condition for Nicaraguan women in Costa Rica.

In this section, I will begin by making the case that the site of border-struggles is not confined to the physical act of crossing a nation-state border; but it has actually been displaced to everyday life by the proliferation and diffusion of bordering designs that target the processes needed for the reproduction of life. In a context such as Costa Rica, where there is limited infrastructure for deportation, the threat these women face is not a threat of physical removal from the country, but a threat of social removal from Costa Rica's welfare state. The bordering designs framework elaborated in this chapter is intended to evidence the ways design has been used by state logic to control and manage migrant populations and illustrate some mechanisms by which state power is enacted through these designs.

In the following chapter, the use of undocumented Nicaraguan women's experiences is intended to offset the lack of contextual specificity of literature and theory in migration studies to uncover the Nicaraguan-Costa Rican migration as part as a larger (but often overlooked) trend of South-to-South migration. The perspective from undocumented Nicaraguan migrants is also the basis to understanding the embodied experience of inhabiting an undocumented body and how this condition produces alternate experiential knowledge about being-in-the-world. This experiential knowledge serves to identify fluid, dynamic and diffused power dynamics embedded in the sociotechnical systems that make up everyday life. Using ethnographic research, in combination with political theory, critical geography, feminist and decolonial theory this research aims to uncover the subjective nature of dwelling in the borders.

4.1. THE EVERYDAY AS THE SITE OF BORDER-STRUGGLES

An examination of how design contributes to creating and sustaining conditions that generate precariousness and uncertainty in everyday life for undocumented migrants, requires us to start problematizing the notion of borders solely as territorial nation-state delimitations. Individuals are designated migrant as a

product of a bodily-presence in a country different from where they were born or designated as citizens. Underlying the migrant condition is an implication of otherness which generates differentiated possibilities of action that enforce and reinforce the condition of otherness in everyday life.

The concept of bordering stems from different scholars in critical geography and critical border studies and is often used to describe the exponential increase in state surveillance and border control in the past decades that has escalated by the 9/11 incidents in the United States. In the following section, I do not intend to make a thorough literature review on critical border studies, instead, I will focus on the issues that are directly related to the delegation of the institution of nation-state borders to design products in order to build a design-informed bordering framework.

The epistemological shift from geographically bounded cartographic borders to dynamic processes of bordering that emerged in critical border studies (Mezzandra & Neilson, 2013; van Houtum & van Naerssen, 2002) is foundational for situating design and interrogating design's complicity in creating and sustaining certain conditions for migrant populations around the world. The concept of bordering that emerges in the past decades in critical border studies not only implies the epistemological shift from border to bordering, it also allows an exploration of the ontological dimension of the migrant condition. Bordering, therefore, becomes a method to understanding the everyday life experience of migrants. While there is numerous scholarship in the field of critical border studies that consider the material possibilities of bordering and the material practices that emerge from reinforcing and contesting borders, there is not a lot of scholarship that emerges from the field of design and design studies that situate design in contemporary practices of bordering (notable exceptions are Keshavarz, 2016; Fry & Kalantidou, 2014).

Although most scholarship in the field of critical border studies emerges from the Global North and aims to understand how the logic of control and power operates in dealing with South-to-North migratory flows and border relations, this dissertation seeks to understand a particular situation of South-to-South migration. While situating research in the South-to-South context requires us to ask the question of how do we offset the lack of geo-political specificity in the theory, I also believe it is fundamental to understand the logic of the Global North in controlling and regulating migrant populations since this is the logic that generates much of the technology that then is imported to the rest of the world in an effort to control and stop migration flows further South before reaching the North.

Given Central America' geo-political specificity as the corridor that connects the North with the South, this context proves to be a good example to illustrate this geopolitical trend in global border regimes. Global regimes of bordering are particularly evident in the Central American region as the expansion of the International United States border covers most of its territory in an attempt to stop Central and South American flows from reaching U.S. ground (Miller, 2019). A comprehensive bordering framework must not be confined solely to the institutional domain (state actors); as global corporations are currently developing systems and technologies of bordering that are applied globally in an attempt to impose universal standards of migration control, such as biometrical technologies present in passports and other technologies of migration control (for more about global migration and border regimes, see Düvell, 2002).

Using the previously developed (in Chapter 2) framing of design — understood as materialization of logics — in combination with the aforementioned theories of bordering, I would like to introduce the concept of bordering designs. This concept is my attempt to consider the articulation of things that are part of regimes of practices that respond to the logic of state power, specifically biopower with the intent to manage and control of populations inside of nation-state boundaries. This framing of bordering designs also seeks to uncover how these regimes of practice use design to legitimize and naturalize certain human conditions that are imposed on bodies as a result of population management. By developing a design-informed bordering framework, it allows us to uncover, firstly, how design has embedded sovereign power into everyday objects, therefore moving the border to multiple locations. Secondly, this framework provides us a way of thinking about sociotechnical regimes of bordering, by which it is possible to identify and locate material things such as artifacts, infrastructure and designed-led processes such as services and policy in shaping the material conditions in which Nicaraguan women reproduce their everyday life in Costa Rica. Based on Mezzandra & Neilson's (2013) border as a method, this framework intends to place design as an actor in migrants' border-struggles.

With this bordering designs framework, I aim to provide a reading of critical border studies through a decolonial lens in order to uncover the colonial legacy of establishing categories of difference that leads to differentiated possibilities of action, including moving. A decolonial reading of bordering processes can provide insights of the colonial logic that encourages North to South movements, while discouraging South to North and South to South migration flows. In the specific context of this research, the decolonial perspective makes possible the uncovering of the legacy of colonial logic present in migration control in Costa Rica, where wealthy migrants usually coming from Europe and the US have numerous opportunities for regularizing their migration status and have avenues for citizenship that are exclusively determined by their economic possibilities, which are often not shared by economic migrants coming from the Global South, such as Nicaraguans who make up the vast majority of migrants in Costa Rica. What this dissertation intends to expose is that the colonial

logic or "coloniality of power" (Quijano, 2000) has been foundational in the formation of social relations that produce the condition of otherness between Costa Ricans and Nicaraguans. The concrete manifestations of this relation of otherness can be seen in the conditions in which Nicaraguan migrants carry out their everyday lives.

In the following sections of this chapter, I will present four considerations of how design has enabled state and non state actors to develop bordering designs that generate particular conditions in migrants' everyday life. The first one considers how the border has moved from the edge of the nation-state to the center of it, both in the physical and discursive domains. The second consideration entails the process of moving away from massive border infrastructure bound to the nation-state border to developing a scattered architecture of bordering devices present in everyday life. The third consideration explores the experiential and temporal domain of dwelling as a migrant, it considers how bordering strategies are not spatially bound, therefore gaining a temporal dimension that affects everyday life. The final consideration uncovers how design has been complicit in rendering integration of migrants unobtainable, thus allowing for processes of differentiated forms of inclusion, which among other things, create racial and gender segregation of labor.

Four tenets of **bordering designs:**

- From the edges to the center
- From massive infrastructure to diffused materiality
- From spatial borders to temporal borders
- From integration to differential inclusion

4.2 FROM THE EDGES TO THE CENTER

Countries around the world have tried to materialize their borders by erecting walls, building fences, wiring stretches of land, digging ditches, increasing control points, doubling border patrol, using satellite technology, developing better screening processes, etc as an effort of making the border tangible—beyond lines on maps—and to mitigate border's porous nature. "The linear border, a cartographic imaginary inherited from the military and political spatiality of the nation state has splintered into a multitude of temporary, transportable, deployable and removable border-synonyms—'separation walls,' 'barriers,' 'blockades,' 'closures,' 'road blocks,' 'checkpoints,' 'sterile areas,' 'special security zones,' 'closed military areas' and killing zones." (Weizman, 2007, p. 6). Despite the millions of dollars invested in securing borders none of these strategies have made them impenetrable, instead, it has generated better

and more sophisticated technologies for border crossing.

The relational nature between border-reinforcing and border-crossing technologies is a prime example of how top-down design is contested by other kinds of design, counter designs. These other designs, which stem from complex practices of contestation defy the excessive surveillance and policy aimed at restricting human mobility (this issue will be at the center of the discussion in Chapter 5 of this thesis). As an attempt to compensate for failed border control, "a proliferation and heterogenization of other components and institutions of borders" (Mezzadra and Neilson, 2013) has emerged as part of the logic of state control and ordering, a variety of devices intended for '(b)ordering' (van Houtum, 2002). Operating within the boundaries of the nation state, the logic of sovereign power and control is now deployed towards the management of populations by intervening in the processes that enable the reproduction of life. Therefore, allowing and providing the services to reproduce life to the citizenry and populations of migrants that are desired (usually wealthy migrants and skilled labor), while disallowing the possibilities of reproducing life to those deemed undesirable (poor migrants and low skilled labor).

The dual nature of borders is something most scholars in critical border studies have noted in more recent literature; while borders have become more flexible to allow for an almost unrestricted exchange and flow of goods, commodities and information, borders have become more rigid for human movement, but not all humans experience this rigidity equally. Étienne Balibar (2003) notices the former and refers to this selective restriction as "the socially discriminatory function of borders":

"We can see that in practice there is now a separation between the control of goods, funds, and information, on the one hand, and the control of migratory flows and displacement of human persons, on the other. Nothing could be more wrong than the idea that globalization would be accompanied by a parallel growth of material, immaterial, and human circulatory flows. Whereas information has become practically "ubiquitous," and whereas the circulation of goods and currency conversions have been almost entirely "liberalized," the movements of men are the object of heavier and heavier limitations. This difference of status appears essential to the defense of the state "sovereignty" in the international political and diplomatic field; it goes together with an intensification of the socially discriminatory function of borders (in other times we would have called this their "class function"). A world that is now broadly unified from the point of view of economic exchange and communication needs borders more than ever to segregate, at least in tendency, wealth and poverty in distinct territorial zones. (...) The poor, at least, need to be systematically triaged and regulated at points

of entry of the wealthier nations. Borders have thus become essential institutions in the constitution of social conditions on a global scale where the passport or identity card functions as a systematic criterion." (p. 113, emphasis mine).

What Balibar is referring to in the previous passage is key to understanding the colonial logic that informs what kinds of humans are allowed unrestricted movement around the world and what kind of humans face severe mobility impositions.

"No nos quieren aquí porqué no somos **migrantes de etiqueta**"

[They don't want us here because we are not 'designer brand' migrants]

—Ana María, a 36 year old undocumented domestic worker

Migrantes de etiqueta, 'designer brand' migrants is the term Ana María, who has lived in Costa Rica for over 20 years, uses to refer to the kinds of migrants she believes are desired in Costa Rica. For Sofía, 'designer brand' migrants are those that not only se ven bien [they look good] but can also buy 'designer brand' stuff. In her comment she was referring to two things, first how Costa Ricans in general tend to regard certain kinds of migrants more favorably, mostly white North American and European. Secondly, she was noticing that Costa Rican migration policy is designed so that wealthy and high skilled migrants can easily access avenues for work permits and legal residency, —see Capítulo II of Ley Nº 8764 Ley General de Migración y Extranjería¹— while there is not a lot of policy intended to facilitate legal residency for low-skilled, poor, economic migrants.

The shift from considering borders solely from a geographical discipline allows a wide range of other disciplines such as political science, history, anthropology, sociology, law and the humanities to start problematizing borders beyond their topology and geography to consider the ontological character of borders. Opening the study of borders is what affords us to start situating other kinds of bordering designs, some can be more concrete such as the policy and legislation that Sofía was referring to explicitly, while other can be more subtle and inconspicuous, such as the cultural designations of what kinds of migrants

¹In the current national legislation regarding migration, Article 79 states that certain kinds of professionals, scientists, interns and specialize technicians are entitled to apply to legal temporary residency for up to two years. Article 81 states that foreign retirees can apply to legal temporary residency as long as their retirement is more than \$1000US a month (note that the currency used in national legislation is the US dollar, although Costa Rica's national currency is the Costa Rican colón). Additionally, Article 82 establishes a category as "Rentista" that allows foreigners with a monthly income over \$2500 to apply to legal residency in the country.

"look well" and are regarded as desirable. Both of these instances are part of a larger design that's inevitably informed by colonial logic, which encourages migration from the Global North and wealthy professionals, while rendering migrants such as Ana María, who does not have a high school diploma and is a domestic worker, as undesirable. The interdisciplinary nature of current critical border studies opens the possibility to consider the "cultural, social, economic and religious borders that even though often invisible have major impacts on the way in which human society is *ordered*, *organized and compartmentalized*." (Kolossov & Scott, 2013, p.2, emphasis mine).

Paasi (2012) also refers to this shift in the epistemology of borders as: "the abandonment of the view of borders as mere lines and the notion of their location solely at the 'edges' of spaces. This has helped to challenge strictly territorial approaches and to advance alternative spatial imaginations which suggest that the key issues are not the 'lines' or 'edges' themselves, or not even the events and processes occurring in these contexts, but nonmobile and mobile social practices and discourses where borders—as processes, sets of sociocultural practices, symbols, institutions, and networks— are produced, reproduced, and transcended." (p. 2304, emphasis mine).

The concept of bordering designs introduced here intends to interrogate and examine how design has been critical in the ways these borders, understood more broadly as events and processes of inclusion/exclusion, are (re)produced in everyday life. Considering everyday life forces us to consider how borders have been materialized in the sociotechnical systems that determine the events and processes that allow for the reproduction of life. Therefore, when we consider how the border has moved from the edge to the center, it is not only referencing a territorial center, as it moves inwards from the nation state border, it is referencing the center as the site where everyday life is carried out; where the processes that maintain and preserve life are performed and unfold through everyday life practices.

UNDOCUMENTEDNESS: A DESIGN FOR MAKING BODIES "ILLEGAL"

An interrogation centered on how borders have moved to the center of everyday life must consider how the border is dematerialized from the edges of the nation state and rematerialized in mechanisms for population management. This logic of biopower is what generates a series of borders that serve to establish "categories of difference that create socio-spatial distinctions between places, individuals, and groups." (Foucault, 2013 [1975], p.3). These categories of difference become materialized by things that allow for differentiated possibilities of action.

If we take the designation of *undocumentedness* as a bordering strategy, it is possible to situate a constellation of documents—those that make up the condition of *documentedness* such as a birth certificates, a state-issued identification cards, passports, work permits, student visas, proofs of health insurance, invitation letters, utility bills, etc.—, in creating differential conditions in the reproduction of everyday life processes. These documents, inevitably, surface the issue of designed documents and design's persuasive role in creating bordering devices that naturalize the condition of undocumentedness.

All over the world, there is a designed international system of power dynamics in which some bodies are considered to have "legal" and "illegal" presence under state logic. Discourses that frame migrants as "illegals" have become extremely pervasive in media and in political avenues; one of the aims of this dissertation is to denaturalize "illegality" as a descriptor for migrant population and position design's role in the production of migrant "illegality". In order to do this, we must first start to understand "Illegality" not as a human condition that a person is born into, but as a sociopolitical condition that is produced and imposed by 'the artificial'; making its naturalization only possible within the possibilities afforded by 'the artificial': ID cards, residential permits, birth certificates, employment contracts, death certificates, property titles, rent agreements, health insurance, high school diplomas, a myriad of documents that make up a what we would consider the 'human of modernity'.

For the purpose of my argument, "illegality" is to be understood in relation to the concept of citizenship as both of these terms are fundamentally used to describe a social relation to the state. The naturalization of the term "illegal" is derived from the oppositional nature between 'illegal' and 'citizen' making the two terms in theory and in practice inseparable (De Genova 2002). If we understand citizenship as something that a person is granted and "illegality" as something a person becomes; this *becoming* implies a process that is achieved by a series of calculated actions, usually in the form of legislation that subsequently requires a series of material interventions for its enactment. It is through the understanding of "illegality" as a social relationship to the state that it is possible to deconstruct discourses that frame migrants as "illegals" and we can instead consider the production of the sociopolitical condition of undocumentedness.

The term undocumentedness is extremely useful for the purpose of this dissertation as the term itself explicitly implies the lack of a material thing: documents. It is not a designation that refers to the qualities of a person, it describes the position of a person in relation to a system that ranks and categorizes populations based on their capacity of providing forms of verification and material proofs. Undocumentedness is an instrumentalization of "illegality" while it also serves a process of dehumanization needed to justify

and sustain migrants as exploitable labor. A subject that is included in the state (documented) is considered a subject of rights, while exclusion from the state (undocumentedness) dehumanizes the subject reducing the subject to its body, a body that can be used for underpaid labor and a body that can be shaped by disciplinary mechanisms until it is rendered a subject of rights (Foucault, 2013 [1975]). Therefore we can start understanding "documentation" as a disciplinary mechanism in itself: gaining documentation understood as legal residency and social contract with the state is awarded to those subjects that obey the state.

The system of 'documentation' has been designed based on the logic of verification and proof (Coutin, 2000). It is a system that relies on the possibilities of "the artificial", the human-made world, as it uses designed documents and artifacts that have been delegated the role of verification and it is a system that relies on the persuasive nature of design to establish these forms of verification as unquestionable. It is through design that the conditions generated by the system of documentation become naturalized, although these are not natural.

In true 'modernity' fashion, following a colonial logic, a system that has been designed based on genealogies of verifiable past fails to consider subaltern individuals, individuals that systematically have been negated existence. This is the case of indigenous communities all over Latin America. In Costa Rica, for example, la cédula nacional—the national identification card that's required for voting and it is the precondition for accessing services of the welfare state—, was not issued to indigenous communities before 1991 (Ley de Inscripción y Cedulación Indígena de Costa Rica Ley N° 7225 del 19 de abril de 1991). What this example displays is that we can use the lack of a 9cm x 5cm plastic document as material evidence that, under state logic indigenous people were not considered subjects of rights until less than 30 years ago. Although these indigenous populations were born within the territory of the nation-state of Costa Rica, and incontestably have an ingrained past with the territory, they do not have a verifiable past with the nation state and its structures and so they fall outside of modernity's design, which is used to render indigenous subjects less-than-human.

SOFÍA

Sofía, is a 38-year old Miskita— she is part of the indigenous group Miskitos who are mostly located along the Caribbean coast of Honduras and Nicaragua. She was born in Bluefields, Nicaragua and is technically stateless as a result of not being registered at birth. Although she has been told that she might be able to claim Nicaraguan citizenship, in her particular case it would be extremely complicated on account of her lacking the possibilities of producing a "verifiable" (documentable) past. Her parents were also Miskitos and were not registered as Nicaraguan citizens at birth, they never had birth certificates

nor passports, and when they passed away there was no need to get a death certificate because under state logic they never really existed in the first place. Due to the lack of a documentable past, Sofia was rendered "illegal" at birth by a system that is designed to reproduce practices of modernity that relegate the subaltern into non-humans, they don't really fit into modernity's design and live their lives unaccounted for by the state.

Sofía lives as an undocumented migrant in Río Azul, but rectifying her undocumentation is not as simple as a filling for a visa or a passport. Under state logic, Sofía is a non-human, she does not exist as she is unable to verify herself in relation the state and its institutions, both in Nicaragua and in Costa Rica. Sofía's case represents a process of exclusion that is more complex in its insritutionalization than Yamil's case (introduced in Chapter 2), but what must be noticed is how they are both products of the same logic of modernity. Both of them are currently forced to carry out their everyday lives under the condition of undocumentedness, as part of a 'social-technical ordering' that is foundational to organizing modernity (Law, 1994). Sofía's undocumentedness responds to centuries of indigenous systematic erasure and Yamil's is related to the racialized inscription of "Nicas" in the Costa Rican context.

As with the case of Nicaraguan migrants in Costa Rica, undocumented migrations are above all labor migrations (throughout this dissertation I refer to these as economic migrants). The sociopolitical condition of "illegality" is used to justify the exclusion from social contracts with the state, such as labor rights, making "illegality" a mechanism that generates a pool of cheap and exploitable labor. In the case of Costa Rica, the production of "illegality" (undocumentedness) can only be properly understood at the intersection with racism (Goldade 2008). This is something De Genova notes in his analysis of how "illegality" is produced:

"Therefore, migrant "illegality" is a spatialized social condition that is frequently central to the particular ways that migrants are racialized as "illegal aliens" within nation-state spaces (...) Moreover, the spatialized condition of "illegality" reproduces the physical borders of nation-states in the everyday life of innumerable places throughout the interiors of the migrant-receiving states. Thus, the production of "illegality" as a distinctly spatialized and typically racialized social condition for undocumented migrants provide an apparatus for sustaining their vulnerability and tractability as workers" (De Genova, 2002, p. 439).

This is not something that is exclusive to Costa Rica, on the contrary, the intersection between "illegality" and racism repeats itself all over the world as it responds to the colonial logic: "illegality" is therefore used to make "legitimate"

claims against migrants and frame anti-migrant discourses in judicial terms without recognizing the underlying colonial difference that manifests in racist behavior. The production and sustainment of "illegality" then, is complicit in perpetuating colonial difference and reproducing colonial structural violence. As I have previously mentioned, the discourses that aided the construction of Costa Rica's identity project in the 19th and 20th centuries have produced the Costa Rica(n) and Nicaragua(n) difference based on a racialized identity, these discourses have culminated in anti-immigrant discourses and, more recently in actual violent manifestations against the Nicaraguan population. On an everyday basis, this colonial difference is materialized in the massive production of undocumented Nicaraguan migrants.

In the context of migration, the production of "illegality" is usually understood in terms of deportability. De Genova (2002, 2010) has underlined the relation between illegality and deportability, understood as the threat or fear of being removed at any given time, as a disciplinary mechanism: "it is deportability, and not deportation per se, that has historically rendered undocumented migrant labor a distinctly disposable commodity" (De Genova 2002, 438). However, countries that lack the infrastructure for deportation — which is the case with most South-to-South migrations and, in particular Costa Rica has less capacity for the production of "illegality" than countries like the United States or European countries, — the production of "illegality" operates differently. Given that Costa Rica has fewer resources for erecting border walls, for enforcing migration laws, and for migrant detention and for deportation, the disciplinary mechanisms that are used to exclude, subjugate, repress and exploit migrant workers are then delegated to the infrastructures that from social contracts with the welfare state. The fear of physical removal from the territory is mostly replaced by the fear of social exclusion that leads to social death (Agamben 1995; Campbell 2013; Mbembe 2013).

Systems of information use documents, papeles: as the image of formal organizational practice, these documents make up the "technology for the coordination and control of organizations on which they operate" (Hull, 2012, p. 256). Documents are therefore the bedrock of the state's design for population management and control. The binary of un/documented is a strategy to simplify a part of the world's complexity. The instrumental practice of human categorization (un/documented) creates dissonance between the "documentable" aspects of persons and other aspects that fall out of the "documentable" nature of modernity; it is precisely this disconnect what "produce(s) particular types of subjects." (Kelly, 2006, p. 92). Instrumental categories such as un/documented in practice generate and sustain subhuman conditions for certain migrants. These instrumental categories become part of "the extent to which the mute power of things seems to have worked" a power that "can be gauged by the very great extent to which bureaucracy and

the state both have become naturalised" (Bennet and Joyce, 2010, p.10). In the same sense, the condition of undocumentedness becomes also naturalized within the possibilities of 'the artificial'. Design is critical in naturalizing the condition of undocumentedness, the documents, artifacts, or objects that serve as material evidence of a verifiable past or stand as material proof of a verifiable relationship with a state or any institution, have a persuasive character capable of delimiting the "factual duality of legality-illegality through the artifactual mediations and articulations it designs." (Keshavarz, 2016, p. 328)

The condition of undocumentedness as a sociopolitical category, must be understood as a mechanism of control of populations that intends to discipline subjects. If we consider that the body is the site of the reproduction of life, rendering the body "illegal" is the mechanism by which the border materializes over individuals. This sociopolitical categorization generates differentiated possibilities of action and being in the world which consequently produces particular human conditions that initially derive from the socio-legal relation to the state and are subsequently reproduced by other actors, which is what I will introduce in the next section that discusses how the border has become diffused and enacted by a multitude of sociotechnical systems.

4.3 FROM MASSIVE INFRASTRUCTURE TO DIFFUSED MATERIALITY

If we consider a border in terms of establishing, delimiting difference, imposing control and order in societies, and claiming territories, defining a border in terms of its materiality becomes incredibly difficult, as many things can assume and perform these tasks. Balibar (1998) suggests that through the diversification and multiplication of borders and by moving these from the 'edge' to the 'center' of public space; their presence becomes more pervasive and inconspicuous and harder to account for; to the point that we can consider entire countries becoming *borders*. Kolossov & Scott (2012) illustrate this claim by stating that "in many countries police can check the papers of supposed illegal migrants anytime and in any geographical point of a country" (p.6).

In recent years, discourses claiming a 'crisis' of the border have emerged from countries in the Global North challenging the existing border-technologies and changing the geopolitical landscape around the world. These discourses intend to erect and reinforce borders in order to cut flows from the Global South and have been successful in framing the border as an important site of conflict that needs securitization that will keep others from entering. Through the use of othering discourses, politicians have gained public support to fund massive border infrastructure in the Global North with the aim to regulate 'threatening' flows coming from the Global South. These discourses are embedded in the

material erection of walls, in the multiplication of check and control points, in the deployment of more immigration agents patrolling the border, in the militarization of police officers, in identity cards, among others technologies of border management.

Beyond state and private border infrastructuring, these discourses are more successful in exerting control when these "practices and discourses 'spread' into the whole of society" (Paasi, 1999). The discursive nature of borders, which can be considered a fundamental component of the dynamic expression of contemporary and historical borders, uses sentiments of sovereignty and nationalism to take over popular narratives, moving the site of conflict from the border or the edge of the nation state to everyday life. This allows us to think about how to situate actors that perform border-reinforcing practices beyond state actors, and consider the delegation of power to citizens through the appropriation and reproduction of these discourses.

The issue of delegation is of importance at this point in order to think about the ways power adopts diffused materialities present at the level of everyday life. Latour's (1992) theory of delegation or translation can be used to understand the relational nature between the social and the designed and the interactions that emerge between human and non-human actors. This theory of delegation enables us to think about 'programs of action' inscribed in artifacts and non-human actors intended to modify and shape human behavior. Design theorists such as Domínguez Rubio and Fogué (2014) refer to this as the "enfolding capacities' of design. That is, on the capacity of design to inscribe, congeal, or hardwire, different political programs and power relations into materials, spaces and bodies" (p. 1). It is not possible to understand the condition of migrants without an analysis of the material forms that make up for this condition, according to Weizmann (2012) "there is no social issue without an understanding of the articulation of materiality and form, and there is no form that does not have the imprint of socio-political forces".

A theory of delegation turns its attention to actors such as humans, objects, things, non-humans, materiality, environments, infrastructure to make sense of the ways the world is assembled (Latour, 1992; Haraway, 2004). It looks at issues of distributed agency and relational ontologies through networks or assemblages that describe the complex relations between humans and non humans and how all kinds of actors condition being-in-the-world (Bennett 2010). A theory of delegation allows us to start understanding how a documented-being-in-the-world differs in terms of possibilities of action from an undocumented-being-in-the-world. Approaching the issue of the distributed materiality of bordering devices through theories of delegation and translations allows us to uncover configurations of distributed power or constellations of scattered Foucaldian microphysical power.

Lets take, for example, Michel de Certeau's (1981) observation of how, "life consists of constantly crossing borders (...) It is known that there is no identity document in the United States; it is replaced by the driver's license and the credit card, that is, by the capacity to cross space and by participation in a game of fiduciary contracts between North American *citizens*" (pp.10–18, emphasis mine).

Identity in this case is tied to belonging to a system of financial exchange and unrestricted mobility; and, in both cases a designed artifact mediates access to these infrastructures. These infrastructures define everyday life processes, especially in the context of the United States where so much of public participation is held exclusively in the economic sphere. Therefore, if the US identity is tied to ability to participate in financial exchange and freedom of movement, migrant integration would also be measured under those terms. In this sense, the credit cards and driver's license adopt a bordering function. In some cases, depending mostly on immigration status, these borders have an exclusionary nature, and in others they act as acculturation devices. .

In the United States, obtaining a credit card is in most cases dependent on having legal work authorization that manifests in a Social Security Number. In a similar manner to the driver's license, it acts as a dividing and exclusionary device for undocumented migrants; significantly restricting public participation in the economic sphere. On the other hand, if a migrant is allowed a credit card, their identity becomes tied to their credit score, which is a measurement of creditworthiness. Having a credit card affords a different embodied experience of shopping, and it opens new practices around consumption. If we understand credit score as an external validation of a form of citizenry, we can start to comprehend the incentive migrants have in adopting practices that will assure them a good score, practices that are tied to the United States' lifestyle, therefore undergoing a process of integration that is initiated by possessing a credit card. Through these two examples we can start placing these artifacts as actors in bordering designs.

THE MATERIAL CONDITIONS OF THE BORDERLANDS

The issue of bordering in design is not new, although it might not have been called that way. A classic example of this are Robert Moses' Long Island parkway overpasses in materializing the dominant class's racial and social class biases (Caro 1974; Winner 1980; but also see Joerges 1999) adopted this bordering nature. In this particular case, the exclusion these bordering strategies seek to establish was directed mostly to African Americans. Bordering strategies are not exclusively directed to migrants, but they are common in creating divisions between hegemonic (power-holders/dominant) populations and minority (vulnerable) populations. Policy, services and artifacts have been designed

by modern institutions (such as governments, private banking sector, public services and utilities providers, among others) as part of current sociotechnical systems to restrict and regulate access for migrants. These sociotechnical systems have become points of conflict for those dwelling in the borders of these systems.

Michel de Certeau's observation about the credit card and driver's license sets some context to understanding processes of identity building in the United States related to economic productivity. Having credit and unrestricted mobility determines a person's productivity in the context of the U.S.; where excessive commoditization and urban sprawl requires credit and driving to be a productive member of society. These two small artifacts that are commonly found in most U.S. citizens' wallets therefore act as gatekeepers to American identity; becoming technologies of division, that is technology that underlines the separation between outsiders from insiders.

Referring back to Balibar's observation of how entire countries have become borders, we could start making the claim that some countries—following colonial logic— have forced certain people such as racialized and gendered populations to dwell permanently in a space that the decolonial, feminist scholar Gloria Anzaldúa ([1987] 2012) referred to as the *borderlands*— "a vague and undetermined place created by the emotional residue of an unnatural boundary. It is a constant state of transition" (p.25). Anzaldúa, through her personal experience of otherness derived from being a lesbian chicana living in the United States, talked about being a *nepantlera*—a subject suspended in a state of in-between, not belonging neither here nor there, that inhabits spaces where practices are riddled with ambiguity and contradiction.

Walter Mignolo's (2010) border thinking provides us a decolonial framework to start understanding the articulation of conditions that make up Anzaldúa's borderlands. The borders that this dissertation is interested in exploring are those that are not inscribed in a physical place, but those that are situated in the embodied experiences of those who dwell in the borderlands. Mignolo defines these borders as:

"The borders and border thinking I am referring to are always restricted to the border or line that divides and unites modernity/coloniality and materializes in actual new walls after the fall of the Berlin wall; in laws, psychological racial barriers, borders of gender, sexuality, and racial classification, and so forth. Now physical and psychological borders in general (that is, not those that emanate from modernity/coloniality) could become, and are becoming phenomena to be analyzed from the perspective and concerns of different disciplines (sociology, economics, anthropology, aesthetics, linguistics and so on)." (Mignolo, 2000, xvi).

This dissertation argues that the design of systems and processes has embedded the colonial logic that generates categories based on hierarchical notions of difference. Border thinking allows us to start understanding how the mechanisms that affect the experience of everyday life of migrants, in particular racialized and gendered migrants (such is the case of Nicaraguan migrant women), are not bound to a location, they don't materialize in one building, and they most often go unnoticed unless one actually dwells on those borderlands and notice the articulation of multiple oppressions that are "fluid systems that take on different forms and nuances depending on the context." (Cantú & Hurtado 2012, 7). Border thinking allows us to situate sociotechnical systems in everyday social processes and allows us to start uncovering the ways the logic of coloniality is performed by technologies that make up 'bordering systems' (van Houtum 2005).

IN DEFENSE OF THE WELFARE STATE: SOCIOTECHNICAL (B)ORDERS

On December 1, 1948 the Costa Rican army was permanently abolished. As mentioned previously, this move consolidated Costa Rican national identity as a peaceful and forward society which has also derived oppositional narratives of difference between Costa Ricans and its Central American neighbors who are regarded as violent and backward. Additionally, funding used to support the army was reallocated to establish a robust welfare state. Symbolically, this welfare state is also a foundational of a more contemporary Costa Rican identity. Materially, it makes up large networks of public infrastructure centered in providing public education, healthcare, housing, and basic services. In the context of this research, the points of access to the welfare state become critical sites of border-struggles.

As I have mentioned before, most South-to-South migrations are operationally different from North-to-South migrations because the receiving country often lacks the resources and infrastructure for deportation. This generates a number of contextual situations: on one side Nicaraguans prefer to move to Costa Rica rather than countries like the U.S. because migrants share the belief that it is easier to cross the border—especially in view of current situations of migrant detention along the U.S.-Mexican border. Of course, this decision is also informed by social, historical and geographical factors as well, but the perceived permeability of the Costa Rican-Nicaraguan border is a common reason for choosing to move further south than to head north to wealthier North American countries.

On the other side, the country has deployed a proliferation of governmental and migration technologies, bordering designs, that are embedded and dispersed throughout public infrastructures and services. These bordering designs displace state surveillance from immigration authorities to other state officials such as clerks in public education, housing, and other public institutions (Coutin 1993). It is not the police officer migrants fear, but the state clerk. This is not an exclusive phenomenon to Costa Rica—, as it is actually a global trend in border regimes since the 9/11 events (van Houtum & van Naerssen 2002; Kolossov & Scott 2013). However, in Costa Rica, it becomes particularly noticeable due to the lack of border and deportation infrastructure and the popular belief that there is a need to "preserve" the integrity of the Costa Rican welfare state.

Mainstream media and some political discourses are often centered on how undocumented Nicaraguan migrants are "draining" the state because they make use of the services of the welfare system without contributing to it. According to María, a 34 year old undocumented domestic worker, one of the main problems these discourses fail to acknowledge is how common it is for Costa Rican employers to feel less inclined to hiring documented migrant workers because they would rather not pay for the employer's share of the mandatory contribution to the welfare system. The Caja Costarricense del Seguro Social (CCSS), the Costa Rican Social Security Fund—the institution that administers the country's funds used to cover the public healthcare system and additionally serves as a retirement fund for pensions—is financed by monthly contributions from both employers and workers. Employers are mandated by the Costa Rican labor code to cover the CCSS contribution for each employee they have in their payroll. In the case of undocumented migrants, although they might get paid the same as a Costa Rican or a documented migrant, they are not eligible for CCSS coverage, therefore employers do not have to cover the cost of their insurance. Furthermore, the exclusion of legal labor contracts make undocumented migrants a source of particularly cheap labor.

MARÍA

"¿Tiene papeles?" Do you have papers? Was on of the first questions María's patrona asked her when she first arrived to her house in Curridabat to interview for a job as la muchacha, the cleaning lady.

"No, señora" María answered.

Upon hearing that, the woman agreed to hire her despite not having papers, She was told she would get paid the legal minimum wage with the understanding that she had to live at their house from Monday morning to Saturday afternoon. She was hired to clean for this family of five members. María was ecstatic when she was told they would pay her minimum wage— when she first arrived to Costa Rica she was told by some of her other Nicaraguan friends that minimum wage was a privilege not enjoyed by many undocumented migrants and that she should take whatever they offered because it would still be more than what

she earned in Nicaragua. As a live-in maid, she works six days a week starting at 5:30 am getting breakfast ready and packing lunches for the younger children and finishes her day around 8:30 pm cleaning after dinner.

In this case, the decision to hire an undocumented migrant was probably determined by the long hours *la muchacha* was expected to work. Although María was told by her employers that they would help her gain legal residency through her employment, two years have passed and the issue has not been brought up since it was discussed when she was first hired. In gaining residency, María would acquire a contractual relationship to the Costa Rican state, a relationship she could use to denounce the long hours she works without any form of additional economic compensation. Effectively, María would become a subject of rights. In denying her any kind of worker rights, her employers are complicit in perpetuating conditions of precariousness among undocumented migrant populations. María's undocumentedness is used to justify that exploitation, her "illegality", renders her legally unemployable and therefore any form of unemployment and payment is credited as benevolent, a belief sustained by both the employer and the migrant.

By just performing the act of asking about Maria's papers, her employer effectively becomes a bordering agent; she can either render the subject unemployable, hire her without a formal contractual relationship, or hire her with the idea of using this contractual relationship as a strategy for securing her future documentation. In any case, what is important to note here is how the employer is actually the party that holds the possibilities of changing (at least formally) the migrant's conditions. This is a glimpse of how Costa Rican welfare state logic operates, for economic migrants, a contractual work relationship is the condition for state inclusion, but state inclusion (materialized in the form of documentedness) is the prerequisite for a formal contractual work relationship.

The migrant condition is often made up of multiple of these irreconcilable systems, migrant lives are suspended in these loops that are made up of clerks, forms, governmental offices, cues, files, documents, proofs, letters, contracts, property titles, etc, a constellation of bureaucratic interactions. This kind of bordering design is based on bureaucratic (b)ordering practices. While in María's case, her condition is sustained by a simple incongruence—she needs papers to get a formal job, but formal jobs require papers—often these loops are the product of more complex systems converging in incompatible ways. These systems are all articulated and networked within different state institutions. Similarly to how Yamil's undocumentedness was produced by multiple situations, objects, and infrastructures; it is also possible to conceptualize the undocumented condition as the result of a multitude of disjointed systems. While these systems are not specifically designed to generate conditions of un/documentedness, the convergence of incompatible systems of population management effectively

subject migrants to perpetual conditions of precariousness.

YESSENIA

Yessenia is 28 years old. She was born in Nicaragua and moved with her family to Costa Rica when she was 8 years old. She lives with her partner in Río Azul in the house her parents left her when they moved back to Nicaragua 4 years ago. Yessenia has a 5 year old son and is currently 5 months pregnant, which means she needs regular access to health care services. To access non-emergency medical services she requires a valid *Cédula de Residencia* (DIMEX), a Residency ID, something she currently doesn't have.

About six months ago, Yessenia's husband got mugged at a bus stop in downtown San José while he was waiting for his bus to go home after work. They took his wallet and his phone. In his wallet, he had about 7,000 colones (about \$13US dollars), some change for the bus fare, his and his wife's DIMEX, a photo of Yessenia, and a *postalita de San Francisco de Asís*. This unfortunate event left them both effectively undocumented; without their DIMEX they could not prove legal status in the country and in the case of Yessenia this meant not having access to non-emergency prenatal and ob-gyn attention within the national public health care system.

At the time of the theft, they couldn't afford to get a duplicate of their DIMEX (each one is \$98US), Yessenia's passport had just expired (a valid passport is needed for soliciting a duplicate), and they needed a protocolized affidavit certified by a lawyer proving that the DIMEX card had been stolen (which they couldn't afford the lawyer's fee).

Enough time has passed since her DIMEX got stolen that Yessenia's residential permit has now expired. She would now have to go through the entire process of soliciting a new ID, additionally, she would need to present a letter authenticated by a lawyer in which she explains the reasons why she wasn't able to renew her permit within three months of the expiration date. Yessenia would need four things: her old DIMEX card, \$140US, proof that she is affiliated and contributing to the *Caja Costarricense del Seguro Social (CCSS)*, and a valid Nicaraguan passport. Yessenia doesn't have any of these 4 requirements, therefore she is basically ineligible to get a new ID.

Yessenia is unable to save up the \$140US fee because her husband's minimum wage is currently the only income in their household. Yessenia used to have a job as a domestic worker and caretaker but she had to quit last year because her son's childcare center was shut down due to funding issues. It was a semi-private childcare center that received state funding for its operation, and the state decided to cut its funding. Yessenia's son had a state-funded scholarship

that allowed him to attend the center from 7 am to 3 pm and the scholarship covered the costs of his breakfast and lunch every weekday. Yessenia would pay a neighbor to look after her son from 3 pm to until she got home from work around 6 pm. For reasons unknown to Yessenia, the daycare center lost its state funding and inevitably had to shut down. None of the children were relocated to another daycare center in time, and by the time she found out the center was shutting down, all the other public daycare centers had been filled up. She and her husband decided that the best thing to do was for her to quit her job and stay at home taking care of their son since they could not afford any other alternative. Losing Yessenia's income over the past months plus additional household expenses given that both Yessenia and her son now have to cover all of their meals at home has made it virtually impossible for them to save up the almost \$300US that would cost getting new DIMEX for both of them.

Regarding her affiliation to *la Caja*, the moment she quit her job in order to take care of her son, she lost affiliation and insurance through her employment. She could, however, pay a voluntary affiliation, but even if they could afford it, a valid DIMEX required for enrolling in the voluntary contribution program.

Additionally, Yessenia requires a valid Nicaraguan passport, but hers expired six months ago. She could apply for a new passport at the Nicaraguan consulate in Costa Rica for which she requires a valid Nicaraguan state-issued ID card. The thing is, Yessenia has never had a Nicaraguan ID because when she moved to Costa Rica as an 8 year old child IDs were only issued starting at age 16. Two years ago, in 2018, Nicaraguan consulates around the world began issuing IDs for Nicaraguans living outside of the county. Normally, this would allow Yessenia to get her Nicaraguan ID at the San José consulate by paying the fees and presenting her birth certificate, unfortunately, Yessenia, like many Nicaraguans in Costa Rica, does not have a copy of her birth certificate. Birth certificates are not issued at Nicaraguan consulates, which means Yessenia can only request a copy at a Registro Civil office in Nicaragua. Without a passport or any form of official Nicaraguan identification, she would have to go to Nicaragua and cross the border undocumented.

Yessenia's situation is the rendering of a life that is suspended in state bureaucracy limbo, aggravated by incompatible systems of information between her country of birth and the receiving country. Yessenia is not alone, many of the Nicaraguans I encountered throughout my research didn't have a copy of their birth certificate, or found that their birth certificate had errors on it, or were never registered en el *Registro Nacional* making their birth certificate nonexistent. Regardless of the reasons for not having this one document, state logic simply reduces humans into categories of documentable (a person that holds the possibilities afforded by state systems for rectifying their own "illegality") and undocumentable (a person that falls outside of the possibilities

afforded by state systems to rectify their own "illegality").

BUREAUCRACY: WHERE THE SOCIAL MEETS THE TECHNICAL

For migrants, bureaucrats and state officials perform gatekeeping roles—the person at the hospital desk can decide whether or not to admit a sick child, the person at the school registration office holds the forms needed to enroll students, the clerk at the registration office has the possibility of filling out the birth certificate with the correct information, the consulate official determines if a person is worthy of an entry visa through an interview. Additionally, bureaucrats and state officials can effectively act on the powers delegated to them by governmental technologies of bordering, as evidenced with Yamil's mom when she got threatened to get deported by a CCSS clerk, proving how these gatekeeping roles can escalate to actual immigration policy enforcing roles. Bureaucracy is then used as an exercise of state control that creates uncertainty (is my child going to get medical treatment?) and fear (will this person report me to the immigration authorities?) among migrant populations.

Although we could consider that "[b]ureaucracy develops more perfectly, the more it is 'dehumanized,' the more completely it succeeds in eliminating from official business love, hatred, and all purely personal, irrational, and emotional elements." (Weber 1978, 975); as a sociotechnical system made up of materiality, technology, and practices, it is practically impossible to separate documentation from the person who documents. Every Nicaraguan migrant recalled having experienced some form of prejudice or contempt from governmental and state employees in Costa Rica. When Karla, an undocumented Nicaraguan, tried to take her Costa Rican-born son to the hospital because he was sick, she recalls how they were refused treatment on account of her undocumentedness.

"No me vieron por ser Nica" ["They wouldn't see me because I'm Nica"]. Karla told me.

We can start identifying these bureaucrats as points where society infiltrates state structures (where the social meets the technical system). These civil servants become the points in which the technocratic nature of bureaucratic documents clashes with the subjectivities of individuals generating practices that reproduce the colonial difference between Costa Rica(ns) and Nicaragua(ns). Consequently, safeguarding the welfare state and its resources becomes part of the clerk's job description; with no functioning army, the Costa Rican state has successfully delegated it's preservation to the forces of civil servants. As Goldade (2008) has noticed "current racism departs from Costa Rica's historical identity project (...) For one, rates of Nicaraguan migration to Costa Rica tripled over the 1990s at the same time that Costa Rica implemented structural adjustment programs, thus intensifying the migrants' perceived drain on limited national

resources. Two, eroding security and increases in crime have been directly explained by rising rates of migration in terms of race." (2008, p. 109)

In true bordering fashion, bureaucracy serves a dual function of excluding and/while including. While this research mostly focuses on the lack of documentation as an institutional production of "illegality", there are other forms of documentation that are not designed with the purpose of producing "illegality", but are highly effective in enacting other forms of exclusion. Practices that fall on the margins or outside of these modern state institutions, the most evident example for this are births outside of hospitals such as Sofía's, but marriages also happen outside of modern judicial institutions and kinship relations do not necessarily respond to documentable blood-relationships, all of these relationships are often non-verifiable.

These bureaucratic state practices of population management and control are designed based on the normative idea of a human, one that operates exclusively within modern state institutions and as a result, is educated and literate, justifying how writing and reading has become the base of regimes of control, given that reading and writing is the precondition to interacting with any form of documentation (Hull, 2012). Poor and uneducated migrants are often unable to successfully navigate bureaucratic interactions both in their countries of birth and in their receiving countries and these structural barriers are commonly aggravated by the incompatibility of systems of bureaucracy between different countries. Which is why the migrant condition must also be understood as an intersectional identity. While some migrants are able to develop certain strategies to avoid complete institutional exclusion, often they are completely or partially left out of formal state organization, this exclusion forces undocumented migrants to operate within other kinds of infrastructures and possibilities afforded by the logic of informality (this will be elaborated in detail in Chapter 5).

(B)ORDERING MOTHERHOOD

Undocumented women like Ana María, Karla, Yessenía, and almost consistently all the women I engaged with, do not live in fear that the police might come and ask for their papers, their actual fear is that the PANI (*Patronato Nacional de Infancia*, The National Children Welfare Agency) might come and take away their children. Where deportability fails to serve as an everyday disciplinary mechanism, motherhood is effectively used to enforce discipline. Once these women have children, either born in Costa Rica or Nicaragua—as long as they are minors, the Costa Rican state will assume a protective role over all children in the territory (the distinction in terms of access to the state and state protection by nationality is enacted after minors turn 18-years-old, as in Yamil's case).

The State, through the institution of PANI has authority in intervening directly in the lives of these women. At a conversation I held with a group of 14 Nicaraguan women (undocumented and documented) all of them agreed that the state agency and institution they would like to change or get rid off would be PANI; not the police, nor immigration police, not even CCSS, just PANI. All women, who are all mothers, share a common fear of PANI coming and taking away their children. From their experience, it becomes clear that the state uses motherhood as a disciplinary device intended to ensure that children will be brought up following the values and dominant culture of the state. Any childrearing practice that deviates from these values, therefore, becomes a legitimate claim for the state to step in and rectify the deviance by inserting the child into the state-controlled child protective services until women are able to prove that they've corrected such deviance.

Nicaraguan women are often singled out as bad mothers as a result of being poor and racialized. The threat of child welfare and protection services is used by non-state actors, such as neighbors, and state-actors such as teachers, police officers, and civil servants of CCSS, to police and control poor, migrant women and make sure they are raising their children under the receiving country's values and conducts, in an effort to neutralize the threat of cultural difference infiltrating and disrupting the cultural order shared by members of the nation-state. This is a form of networked, dispersed state power that ensures cultural homogeneity and that these children will be molded by their mothers into disciplined subjects.

Everyday life for these women is then perfused with performative acts to demonstrate compliance with the State's imposition of what it means to be a good mother, many times surrendering their own cultural practices and values. For many of these women, the tactical benefits of operating under the logic of invisibility is surrendered when they become mothers; motherhood puts them in plain sight, allowing neighbors, teachers, school nurses, and doctors to step in and perform bordering practices.

It is worth noticing that women's migrant bodies are policed even before they become mothers. When I first walked into the Vinculos center, I noticed the number of informational posters produced by the CCSS regarding women's reproductive health that were pinned up the walls. When I asked Ixchel, the woman that runs and manages the organization, about the posters she replied that CCSS's workers would visit the center regularly to provide information about contraception and reproductive health and would leave posters and brochures behind for distribution among the members of the organization. I asked her if they ever came to provide other kinds of health-related information and she couldn't recall if that had ever happened. The state's concern with migrant women's bodies seems to lie exclusively on its reproductive capacity; a concern



Reproductive rights and sexual health informational posters found on one of the walls of the Vínculos center

that is directly tied to population control and more specifically to birthright citizenship. In its capacity of instituting public health policies, the CCSS steps into the role of population reproduction management backed by the state's interest in future citizens. In this context, these posters have been delegated a role of biopolitical persuasion, these are a material tools and resources intended to police and control women's bodies through the discourse of reproductive health.

With what I have presented so far, I believe that it is possible to start disclosing, at least initially, why the undocumented migrant condition can be understood as a designed condition. It is by design that the state first renders bodies "illegal" by means of undocumentation. The state then enacts over that "illegality" through state exclusion and that same exclusion is able to sustain the undocumented condition, evidenced by Yessenía's inability to obtain her residency card (DIMEX). The state is also effective in delegating migratory policing to civil servants (such as the CCSS clerk that threatened to deport Yamil's mother). Additionally, the state uses exclusion from welfare services as a disciplinary mechanism and in the specific case of women, it uses the welfare system to police women's bodies as well as actively using welfare services to discipline mothers by using the threat of removing their children. Therefore there is a multiplicity of sociotechnical systems that are part of everyday life that are effectively conditioning undocumented migrants.

What needs to be noticed is that the same sociotechnical systems that make up the welfare state, which allow and support the processes needed for the reproduction of life for most Costa Rican citizens, are designed to actively disallow the reproduction of life under the conditions of undocumentedness. For migrants, these systems become critical locations of their border-struggles.

4.4 FROM SPATIAL TO TEMPORAL BORDERS

The issue of time is not only present in the underlying identity of migrants (first generation, second generation); the migrant condition itself generates particular temporalities in migrants' everyday life. Border-dwelling entails a human condition where the site of border-struggles is located in the embodied experience of inhabiting a world that has been designed to erase ambiguity and create a cohesive order by neutralizing difference. When this difference is carried in the body the border struggle is then centered in the reproduction and sustainment of life.

An understanding of the condition of undocumentedness centered in the experience of migrants necessarily needs to consider the issue of temporality of experience. "When the subjective dimension of border crossings and struggles

is introduced, the border acquires a temporal thickness and diversity that is not fully discernible within an analysis that systematically privileges spatial qualities." (Mezzandra and Neilson, 2013, p.213). Therefore the border gains a temporal quality that is only understood through the experience of those who are conditioned to dwell in the borders.

To dwell in the borders is to perform everyday life as a series of border-crossing tactics. These tactics are to be understood as actions that depend primarily on time and are not determined by place, since they lack institutional bounding (de Certeau, 1984). It is an action that is responsive as it emerges from opportunity: it is impermanent in nature and seeks to contest top-down bordering strategies that are intended to manage and control migrant populations. Related to the ontological nature of design, bordering designs generate border-crossing tactics (which are also designed practices, led by migrants and respond to other logics), which in turn inform and modify existing strategies, which subsequently generate new tactics.

These bordering strategies create a state of discontinuity from the homogenous and shared temporalities of those that have access to the state institutions. Tactics and strategies have a relational nature, tactics are actions that respond and contest bordering strategies, and strategies emerge to dismantle the possibility of border-crossing tactics. Therefore more border regimes are abandoning their spatial boundedness and gaining a temporal thickness by resorting to technologies of temporal management in order to neutralize the threat of border-crossing tactics. In the United States this becomes evident in the deployment of immigration raids well beyond the surrounding border areas that are targeting migrants carrying out their everyday life activities: taking their children to school, using public transportation. These strategies are abandoning the spatial boundness of the territorial border and are targeting the domain of everyday life for migrants.

An everyday life that is conditioned by bordering designs creates a state of permanent discontinuity from the 'homogenous analogical time' that makes up the shared experience of members belonging to a nation (Anderson, 1991, p. 26). These disruptions in time create heterogenous temporalities as these temporalities become conditioned by differentiated possibilities of action. And these temporalities are shaped by operating under other logics (Chapter 5).

For example, how long does it take to access medical attention when needed? For a person that's not covered by the public health care system such as undocumented migrants it is not a simple as attending the nearest hospital, it requires seeking out private medical attention, which is expensive and translates to an exchange of labor hours. These labor hours are also determined by the undocumented condition, as the exchange of undocumented labor is

usually paid below established wages. In this sense, the established and instituted workday also becomes a shared ideal by those that have access to the institutional structures of the state, but for undocumented labor the 8-hour workday extends in time disrupting the homologous idea of time and labor. I will elaborate in Chapter 5 how this temporal blurriness is aggravated in the case of domestic and service migrant workers.

I consider that it is useful to think about these disruptions in time as sorts of time modulations that can be thought as folds. The differentiated possibilities of action afforded by design creates these time-folds in which action is extended over time and escapes the national idea of time.

Transiting through everyday life for migrants in conditions of undocumentedness becomes a series of tactics intended to navigate "spaces of segregation and zones of temporal suspension" (Mezzandra & Neilson, 2013, p. 154). These tactics, when considered a biopolitical event, "allows us to understand life as a fabric woven by constitutive actions and to comprehend time in terms of strategy." (Hardt & Negri, 2013, p. 240). This event gains the qualities of a design situation as it requires a forward-looking gaze, the event seeks to contest a restriction of action and formulates alternative possibilities of action.

As I have mentioned before, in the case of Costa Rica, state bureaucracies become effective control mechanisms by establishing the processes that manage state inclusion/exclusion. Documents that are the operational basis of these processes often have specific lifespans inscripted in them that determine the validity of documents and temporarily condition this inclusion or exclusion.

Bureaucratic bordering practices are also quite effective platforms for allowing power to materialize in dynamic and fluid ways by routinely changing procedures and processes needed to renovate them (Kelly, 2006; Hull, 2012). These temporal dynamics are precisely what cause migrants to fall in and out of conditions of un/documentation. Many migrants' lives are marked by the temporalities of their migratory status, like in the case of Yessenía.

This is what Coutin (2000) refers to as "temporization of presence" — processes by which the (un)documented qualifies or is disqualified for adjustments of their legal status depending on the accumulation of continuous, verifiable (documentable) requirements. According to Coutin, the possibility of a documentable present lies in having a verifiable past, and it is the documentable present the prerequisite for eligibility for a documented future. In Yamil's case, that possibility of having a verifiable past was negated by a clerical error and the possibilities of rectifying this clerical error were then shaped by the historic, structural, and material conditions in which he and his family have had to reproduce their lives.

4.5 FROM INTEGRATION TO DIFFERENTIAL INCLUSION

Issues of temporality are not only important in terms of managing population within the institutions of welfare state and its services, for migrants, temporal considerations are also necessary to understand the issue of social inclusion within a nation-state. How long is a migrant a migrant? Is a 20 year-old who was born in Nicaragua but has lived in Costa Rica since she was 3 months old a migrant? Are her Costa Rican born children migrants? The issue of time is very present in the identity of migrants as the question that remains unresolved is at what point is a person remitted from the migrant condition? Through what means does a person cease to inhabit the migrant condition? To what point is a person no longer considered *othered* and becomes part of the national cohesive order? These can all be considered issues related to the concept of integration.

The idea of migrant integration is usually the dominant paradigm within institutions of liberal democratic states regarding how to deal with migrants. Processes of integration have been studied since the beginning of the 20th century within immigration and urban sociology (Cachón Rodríguez, 2008). It is understood as the "degree of cohesion in social relations, cultural practices and values in a context of social change" (Gómez, et al, 2005, p.8). Integration is considered a multidimensional process capable of producing different outcomes depending on a multiplicity of variables that is unique to each individual migrant—such as community of origin, resettling community, family structure, values, education level, experience of trauma, socio-economic class, among others. Integration processes also involve a broad range of participants and actors belonging to different social groups with whom migrants relate on a daily basis—such as: government officials, neighbors, teachers, among others; and it is guided by the laws and institutions that establish its process (Castles, et al., 2005, p. 117). Basically schools, hospitals, mental health institutions, the judicial system, all have an integrationist program that seeks to shape migrant behavior to fit dominant cultural practices. Therefore we can start understanding integration as the dominant institutionalized disciplinary program intended to neutralize cultural difference within a nation-state.

The process of integration that is usually deemed successful in countries of the Global North, is derived from the colonial assimilationist understanding of processes of cultural exchange. This becomes evident when considering that the integration of minorities has been conceived as a one-way process, in which minorities bear all responsibility of inserting themselves in a receiving country and establishing their own value in a society that does not necessarily reciprocate in opening possibilities of action needed for processes that reproduce life. In most liberal democracies, migrants and refugees are responsible for

their own process of integration and they are held accountable for it. Thus, migrants must construct a series of tactics in order to be included into the receiving society, and they have to do this in a context where discriminatory discourses usually make them responsible for the social problems experienced by the rest of society. In Costa Rica these discourses are often framed in terms of Nicaraguans draining the welfare state and Nicaraguans being responsible for the increased crime rates (Goldade, 2008).

It is expected from the receiving country that migrants must reject and abandon their native language, change their wardrobe, adjust their religious practices, educate their children based on the dominant culture's values, find employment, and adopt new work ethics; these being some of the changes often considered minimum requirements for proper integration. These integration practices are often suggested and enforced by diverse state and non-state institutions (such as international development agencies, humanitarian organizations, and NGOs) and they all draw and reproduce an assimilationist perspective of integration, which is undoubtedly a legacy of colonial logic. This assimilationist perspective generates complex and sophisticated bordering regimes as it institutionalizes the barriers migrants face when trying to use and demand for their basic human rights; such as accessing decent work, good education, social security, or civil rights. In this manner, the instances and institutions that are placed to mediate migrants' integration results in the perpetuation and legitimization of their condition of vulnerability and precariousness.

The political discussion centered around integration usually implies consensual adoption of the normative values of a monocultural society while proposing multiculturalism as an inherent characteristic of societies in liberal democratic countries (Castles et al., 2005). This responds to a programmatic shift most countries from the Global North underwent during the 1970s in which these countries abandoned the explicit assimilationist agenda in favor of a multicultural one. It must be noted that this multicultural society is always dominated by cultural values of the dominant population as a state can never be completely culturally neutral; states have to favor the "culture of the statebearing nation", as is the case of language (Kymlicka, 1995). Therefore, even with the shift towards a more "tolerant and pluralistic model" (Ibid, p.14), there are strong underlying assimilationist ideologies embedded in state institutions that reinforce colonial dualisms that have shaped discourses of otherness. Integration has, therefore, become a state-sponsored model that attempts to neutralize the "threat to nationally cohesively ordered space and identity, since the other is now inside" (van Houtum & van Naerssen, 2002).

The threat of migrant minorities disrupting the receiving country's state-order by infiltrating cultural practices and values is somehow offset by state led integration-aimed (assimilatory-implied) policies and strategies to the point that we can start problematizing integration as "a question of control and instrumental insertion, of managing, flows of good and bad diversity, and of focusing on compatibility as the nexus of future social cohesion" by which we can consider how integration has become "a border practice, beyond and inside the territorial border" (Lentin and Titley, 2011, pp. 200-204).

Integration-aimed efforts have been programmed with the regulatory functions usually assigned to borders; these functions operate under the same logic of assimilation, which stems from colonial logic of eradicating difference or otherness in order to maintain and sustain an ordered space and a shared identity among those who inhabit the space. As we saw before, the PANI (National Children Welfare Agency) actively fulfills these bordering functions by policing child-rearing practices in an effort to ensure that children of migrants are brought up under the cultural values of Costa Rican society.

The colonial logic that underlies any integration effort not only seeks to eradicate cultural difference through processes of cultural erasure, it is also incredibly effective in creating hierarchical order. This is where the concept of differential inclusion is important, as it allows us to start exposing the ways colonial logic regulates and orders in more pervasive and successful ways than physical walls, and allows us to expose how the state logic of integration, and how it is programmed within its institutions, makes real integration unobtainable for Nicaraguan migrants.

A concept such as integration rarely (unless explicit about it) considers how colonial legacy creates differentiated forms of inclusion through labor and how it creates further segmentation among different migrant populations. Stuart Hall (1986) refers to this in terms of "differentiated forms of exploitation of the different sectors of a fractured labor force", Hall contends that "we could get much further along the road to understanding how the regime of capital can function through differentiation and difference, rather than similarity and identity, if we took more seriously this question of the cultural, social, national, ethnic, and gendered composition of historically different and specific forms of labor (...) Theoretically, what needs to be noticed is the persistent way in which these specific, differentiated forms of incorporation have consistently been associated with the appearance of racist, ethnically segmentary and other similar social features" (p. 25).

If we take Brown's (2010) thesis that every border (or bordering device for that matter) seeks to "regulate rather than exclude legal and illegal migrant labor" (p.16, emphasis mine), it is possible to see that from the perspective of the state the value of migrants resides almost exclusively in their labor power. In a neoliberal context—which commodifies all aspects of life, and changes the way in which citizenship is conceived and the rights that this entails—integration

perpetuates inequality and competition as the center of social relations (Brown, 2012). People are no longer assigned value based on their human condition, instead, their worth is measured by their ability to consume and produce economic growth which perpetuates precariousness among migrant populations as it enables "a situation in which immigrants are incorporated into certain areas of society (above all the labor market) but denied access to others (such as welfare systems, citizenship, and political participation)" (Castles, et al., 1995, 294).

These differentiated forms of incorporation that are somehow determined by different subject positions can help us understand why Nicaraguan women make up most of Costa Rica's service and domestic labor. The historical discourses that have made Nicaraguans an racialized identity in combination with their gender identity have reduced Nicaraguan women to mostly work in domestic, caretaking labors. The condition of undocumentedness affords employers the possibility to underpay them and subject them to longer workdays. According to Rosibel, a 26 year old undocumented Nicaraguan, the exploitation she experiences is only in part due to not having papeles and partly due to the nature of the work itself and where it is performed. "Nadie te ve" [No one sees you], she's referring to how working as a cleaner and caretaker in a private home removes undocumented workers from the public view and invisibilizes them.

Mixed families can also experience the nation-state rupture by having different forms of state inclusion that produces differentiated possibilities of action among members depending on citizenship or migratory status. Although families are based on affective ties, when families cease to function properly, familiar ties become structured by other circumstances, such as issues of power and justice. In mixed families, differences among family members inevitably produce different subject and power relationships in shared households.

For example, Raquel and Paula are sisters, they were born 2 years apart from each other, but Paula was born in Nicaragua and Raquel was born just a few weeks after their parents migrated to Costa Rica. Raquel, a Costa Rican citizen lives among undocumented migrants, her parents and Paula have not been able to resolve their migratory status. And while Raquel is a second-year Political Science student at the Universidad de Costa Rica, Paula is denied her high school diploma and can only find informal part-time employment as a babysitter. Raquel is quite aware that she will probably be the only member of her family to gain formal contractual employment in the future, and from this awareness, she feels that it is her responsibility to help her family economically. In this sense the nation-state divide is effectively disrupting the functioning of mixednationality families. Furthermore, in this particular case, familiar disruption can't be rectified by moving back to Nicaragua, this will just generate a sort

of reverse power relation proving that nation-divide is irreconcilable with the state-imposed family structure.

AFFORDING TO BE INCLUDED

When I met Juana, a 38 year old Nicaraguan, I asked her to take out her DIMEX card (the Costa Rican residential permit identification card) and to put on top of her dining table. She pulled out of her bag a small coin purse, where at the time she had her DIMEX card, some neatly folded money notes and some coins. I took my own Costa Rican national identification card out of my wallet and carefully placed it right next to hers. I asked her to tell me about the differences she saw between both cards.

"Díay no sé, lo primero que se me ocurre es que la suya es gratis y la mía me cuesta ciento y pico de dólares"

"I don't know, the first thing that comes to mind is that yours is free and I have to pay more than a hundred dollars a year for mine"

Juana's answer is illustrative of how this ID card for her is not an abstracted object, her reading is informed by her own experience with the card and how it's regarded as a material vehicle that stands for a bureaucratic system that is accessed through a fee, in this case \$125US. For her, the difference between the two cards is that for me, someone born in Costa Rica, it is something that is given, freely at my request, while in her case she has to pay for state inclusion. Payment is the manner by which migrants not only gain state inclusion, it is also the manner by which undocumented migrants can rectify their deviant condition, as we saw with Yessenía's DIMEX. As noted by De Genova:

"Every "illegalization" implies the possibility of its own rectification. Once we recognize that undocumented migrations are constituted in order not to physically exclude them but instead, to socially include them under imposed conditions of enforced and protracted vulnerability, it is not difficult to fathoms how migrants' endurance of many years of "illegality" can serve as disciplinary apprenticeship in the subordination of their labor, after which it becomes no longer necessary to prolong the undocumented condition." (De Genova 2002, 429)

From the experience of the several migrants in this research, we can consistently see how in Costa Rica the possibility for rectifying one's "illegality" or undocumentedness is mostly determined by a person's economic possibilities. While undocumented migrants are willing to go through the documentation process despite knowing that it is a complex, lengthy and expensive process, they are discouraged by the sheer costs of the entire process. The issue of the



Example of a DIMEX card

real cost is not about the \$125US DIMEX fee or is even as simple as adding up all the fees of every document, form, taxes and fees needed, there's a multitude of hidden costs that are hard to account for. The cost of time away from their jobs waiting in cues, transportation costs of moving to and from governmental offices, the cost of having to move between countries to get documents that are exclusively available in their countries of birth, legal fees, *timbres*, childcare costs, additional food costs, photocopies, etc. are usually invisibilized. All of these hidden and indirect costs added to the elevated fees make the process cost-prohibitive for most undocumented migrants.

The cost is further exacerbated by the fact that undocumented laborers are often paid below the minimum wages. For example in Costa Rica, 70% of undocumented domestic workers have only partial employment and make three times less than domestic and services workers in the private sector, while only 30% of these women have access to any kind of work-related benefits (paid vacations and *aguinaldo*) and only 14% of them have insurance with the CCSS (Ávalos, 2017).

The current design of the systems and services for documentation processes favors wealthy migrants or high-skilled migrant laborers while sustaining conditions of undocumentation for low-skilled migrants which inevitably ensures a constant source of cheap labor. Around the world undocumented economic migrants are a necessary force of cheap, low-skilled labor. In Costa Rica, Nicaraguans fulfill the demand for underpaid labor in construction, agriculture, and domestic and care services. In the past century, migration, and in particular undocumentation, understood as an instrumentalization for "illegality", has been useful in the reconfiguration of segmented labor markets. The conditions of exploitation Nicaraguans face in Costa Rica are naturalized by the intersection of the legal category of undocumented and the social construction of a racialized identity. Undocumentation and racism are therefore used for the sustainment of cheap labor; in the case of migrant women, gender segmentation of labor also contributes to the sustainment of precarious conditions.

The issue of high costs related to documentation processes, at least in Costa Rica, is present across all the country's migratory policies, with the exception of individuals in need of international protection agreements, such as refugees and victims of human traffic. The elevated costs of migratory regulation processes make undocumentation an issue that disproportionately affects women and children. Since regularization processes operate on an individual basis, the costs of regularizing an entire family are multiplied by the number of family members although they might all live off of one or two salaries. In undocumented or mixed families, priority is usually given to men and older children depending on the economic possibilities of each family.

If we take Yamil's case for instance (in Chapter 2), Yamil and his family failed to rectify his own "illegality" as a child and while the state makes the process of regularization easier for minors (at least in terms of requirements) it does not waive the expenses and fees of the process. Yamil's inability to afford his "legality" as a minor, as an adult he becomes subject of state "punishment" which materializes in the form of state exclusion, specifically, he is unable to finish and graduate from high school. Proving once more that it is not deportability the disciplinary mechanism used by the state, it is exclusion from formal contracts with the state. Through this process of exclusion, Yamil is rendered a low-skilled, undocumented migrant that makes him a subject of exploitation. Thus, through Yamil's example, we can start uncovering how the state becomes complicit in the generation and sustainment of cheap labor.

Entering Costa Rica does not bear the same cost for everyone, as I have mentioned before, Costa Rica has differentiated processes for visa applications, US, Canadians, and EU citizens, for example, do not need visas to visit the country (this is not an issue that involves reciprocity as both the US and Canada require Costa Ricans to have visas for entry). Costa Rica has recently started waiving the visa requirement for citizens of any country as long as they have a valid US or Canadian visa, which means that Nicaraguans who are US or Canadian visa holders can enter the country without a Costa Rican visa. According to the DGME, this is an effort to simplify requirements for visiting the country and a strategy for encouraging tourism. By effecting these migration policies, Costa Rica is effectively delegating surveillance and vetting technology to the US and Canada. This form of technological imperialism is not only importing technology for migrant control, but it is also importing standards from the Global North that determine which kinds of bodies are allowed to move and which are not. Thus, inevitably reproducing geopolitical discourses of difference based on colonial logic.

According to Paul— a 32-year-old Canadian who I met in San José while I was talking to informal street vendors as part of my research—, among certain communities of foreigners such as Canadians, US citizens, and Europeans exiting the Costa Rican territory right before their visa expired is a common practice intended to extend the allowed visiting time. He had personally done it about a month before we met. He told me about how he took the Peñas Blancas bus from San José, walked across the border through the proper migratory channels, he bought a bottle of water and had some lunch on the Nicaraguan side of the border and walked right back into the Costa Rican territory with a fresh new stamp on his passport that allowed him to stay an extra 90 days in the country. While Paul's initial "legality" in the country comes in the form of a kind of birthright that bestows the "right" kind of passport, he can use the same birthright to subvert the mechanisms for migrant exclusion to his own advantage, rendering the power of the border pointless. This is because the

Costa Rican border and bordering designs were not intended for Paul, they were designed for Yamil.

Costa Rica's most recent migration legislation, Ley $N^{\circ}8764$. Ley General de Migración y Extranjería, was passed in 2009. This general law includes a highly contended article, Artículo 33, which has not yet passed as part of the acting legislation because of pushback from migrant organizations and undocumented grassroots efforts².

This article, if passed, would enable the state to charge any migrant who overstays their authorized time in the country a \$100US fine per month of irregular stay. When I asked Paul what he thought about this legislation he considered it to be fair and mentioned how it would be more convenient than having to travel every three months outside of the country to get a new stamp on his passport. When I asked Patricia, a 42 year old undocumented domestic worker who is a single mother of three, she said it would be terrible for her and her family because they all came into the country with visas that expired a month after they first moved 3 years ago. If this clause gets implemented, Patricia would have to pay \$400US a month to cover her and her children's fine while only earning \$300US a month as a domestic worker.

Affording to become legal only ensures migrants differentiated degrees of state inclusion, which depend only partly on migratory status, but does not guarantee that they will be spared from other forms of social exclusion. The nuances of the social dimensions of integration for migrants are obscured by the "legal/illegal" duality. This is particularly true for racialized migrants in Costa Rica such as Nicaraguans: who are conditioned by the logic of coloniality to dwell in the borders.

RÍO AZUL: A SITE OF BORDER-DWELLING

The southeast side of *El Cerro de la Carpintera* is packed with lively colored box-shaped houses that bulge out of the side of the mountain and when seen from the highway below appear to be stacked one on top of the other. Encroached by overgrown banana and mango trees, these houses cut through the thick vegetation that seems to have once entirely covered *La Carpintera*. Right next to these lies a massive plot of land covered in bright green grass that completely smooths out the rugged surface of the mountain. This is the site where the Río Azul sanitary landfill operated for 35 years before closing down permanently in 2007, it is now covered up and beautified by a layer of golf-course-like grass that hides from the public sight the tonnes of toxic liquids that continue to leak

²As of March of 2020, when this dissertation was finalized, Artículo 33 was set to get enacted in April, 2020.



View of Río Azul

into the subsoil and water.

Río Azul was once the country's largest landfill and the site where most of the waste produced in the San José area ended up. During the time the landfill was in operation, swarms of informal dwellings started emerging, some of them built and occupied by the buzos [divers] that would scavenge the landfill looking for waste they could reuse or resell, and some of the houses were built by outcasts and marginalized individuals that had nowhere else to live but these wastelands. They made use of space that no one wanted and for years, they lived among the putrid smells and landfill leachates. After all, as the urban economist Stillwaggon (1998) notes "essentially, squatters occupy no-rent land, land that has so little worth that no one bothers to have or enforce property right to it" (p. 67).

The combination of the rugged, slide-prone terrain in addition to the proximity to toxic waste made this area virtually worthless for any kind of real estate development. Thus, after the landfill shut down, the urban structures and networks remained and have since proliferated with relatively low fear of being cleared out by the state. Although, among the dwellers there is the belief that this might all change soon, there is growing speculation that in the future the state might clear out these precarios [slums] given that a significant section of La Carpintera is devoted to protected environmental land. This protected land is slowly being encroached by newer squatting infrastructures, so even if commercial interests might not be strong enough to disarticulate the precario, the politics behind Costa Rica's environmental agenda just might.

Somewhere in the middle of this assemblage of makeshift houses, narrow streets, alamedas, satellite dishes, and dangling electric wires is Calle Los Mangos. Among the people that inhabit Calle Los Mangos there is a large population of undocumented Nicaraguans, although impossible to determine just how many. The women that run the Vínculos organization think that every one that lives there is either Nicaraguan or at least has some form of Nicaraguan descent or tie. Undocumented or not, every person that lives along that street experiences some form of state and social exclusion. Although this precario might not be as massive as others in the country, it is one of the more visible ones, as it stands on the fringes of San José and towers over the city as a visual reminder of the growing socioeconomic inequality of the country. Calle Los Mangos is effectively a borderscape, a site where the colonial logic of difference is materialized, where the arrangement of space allows for the containment and (re)enforcement of cultural difference.

Calle Los Mangos is not a long street, from start to end it is probably about 600 meters. From the main street a number of alamedas, stairways, and narrower, unpaved streets branch out. The houses here are small and some are even

built right next to each other in a way that they share the walls, a form of material economy. Not all of the houses are made out entirely of corrugated metal zinc sheets, but it is the material that predominates the landscape. Most of the houses are painted with bright lively colors: blue, hues of marine green, purple, coral, they contrast the earthy tones of the rusty zinc sheets and bright bluish-silver steel beams. As mentioned before, most of these houses were erected decades ago while the landfill was in operation, even before most of the migrants that now dwell here moved to Costa Rica. The original squatters that first took advantage of these wastelands now profit from the risk they took when they decided to possess the land.

Most of the Nicaraguan women that live there pay rent for their houses from squatters-turned-landlords. They are invisible renters: the vacuum of formal contractual relationships, allow for exploitative dynamics between the poor and the poorer to emerge (Davis 2006). In Calle Los Mangos, migrants pay their landlord between \$200US and \$300US per month. This is representative of how "illegality" is not a uniform terrain, it generates a spectrum of informal practices and operations depending on possibilities of action and affordances. The possibility of overcharging undocumented migrants is afforded by the fact that they lack the possibility of accessing state protection. Illustrating how undocumentedness, which can be understood as a technology of state exclusion, allows the state to effectively delegate bordering powers to non-state actors. The landlords that refuse to rent out to undocumented migrants, and those that use the condition to overcharge rent join the ranks of employers that refuse to hire based on having or not having papeles, and those that do hire migrant labor under exploitative terms in complicity perpetuating schemes of migration control that do not seek to physically exclude the migrant from the territory, but aim to exclude them from social life and contain them in certain physical spaces while performing certain kinds of labor.

Among the people that live in Calle Los Mangos, the memory of the unpaved main road is still fresh, it wasn't until a few years ago that the street got paved by the municipality of La Unión de Cartago. Most migrants good-humoredly share stories about slipping and falling while they were making their way down the steeply inclined street. This lack of public infrastructure can be seen as an indication of the absence of political interest in the area. The municipality has regularly failed to supply basic public infrastructure such as sidewalks, paved streets, street lighting, and efficient waste and trash removal. However, where the local government has failed, the evangelical church has started to materialize itself. Like in so many marginal and poor communities of the country the evangelical church has found fertile ground in Río Azul. During a workshop-like conversation held with a group of 13 women, I asked the participants to map themselves and their future life plans in relation to their direct environment: their houses, the street they live on, their neighborhoods—

this activity was intended to get a sense of how they believed to have agency over their own lives and the material conditions of their neighborhood. What came up repeatedly among the answers of these women was the role that the evangelical church had in the erection and pavement of streets and sidewalks:

"La iglesia nos hizo la acera de enfrente." ["The church made the sidewalk in front of our house."]

-María, a 34 year old undocumented Nicaraguan

In the past decade, using public infrastructure in neglected communities has become a strategic device in the expansion of the evangelical church across the Costa Rican territory. In the 2018 national elections, the support of poor, marginalized communities was critical in the consolidation of the evangelical-led political party that came in second in the presidential election and gained significant representation in the country's Legislative Assembly (the equivalent of a Parliament). This expansion among undocumented communities can be seen as a long term political strategy appealing to future votes from Costa Ricanborn children of migrants. By stepping into these neglected neighborhoods, the church is using historical state exclusion to build a political platform based on the support of those that have been systematically overlooked by governments run by former political parties.

The neglect from the local government is visible everywhere, huge piles of trash bags build up around the few designated corners of the main street where the garbage truck stops twice a week. At night the streets are pitch black; even though the main road is paved, the streets that branch out from this one are not; the multiple stairwell alamedas have been constructed by current or past residents, with steps carved out directly from the mountainside, some made up of discarded tires weighed down with concrete, some using wooden slabs or concrete construction blocks. These are the material foundations that make up these long stairwells, some residents have to go up and down more than 200 of these makeshift steps as the only way to reach their houses.

Part of the municipal neglect can be attributed to Río Azul's geographic position within its own municipality, it is located in one of the furthest sector of La Unión de Cartago and while it does belong to the Cartago province, geographically and functionally it is more tied to San José than it is to Cartago. Most of the people that live here commute to San José daily, the main access to Río Azul is through Desamparados, San José and public transportation routes are all headed to San José. As it happens, even Google Maps erroneously has the site located in Patarrá, San José. In addition to this geographic vagueness, the fact that the area is inhabited mostly by migrant and undocumented populations—populations that have been stripped from active political participation— allows and justifies the operational omission by the hands of local government.

Nevertheless, the lack of infrastructure experienced in this area must not be solely attributed to the local government. The supply of drinking water is also severely limited throughout Río Azul, despite its location within the Greater Metropolitan Area. Water management and distribution in the country is run by the Instituto Costarricense de Acueductos y Alcantarillados (AyA), a stateowned and operated entity that exclusively controls all of the country's water supplies. In Calle Los Mangos clean, drinking water does not reach all the houses; those that are further up the mountainside have no access to the public, state-controlled water infrastructure. AyA claims that because of the abrupt landscape, providing drinking water supply to the remote houses is virtually impossible because there is no infrastructure to efficiently pump water all the way up. Instead, the AyA has placed a repumping water station halfway up the main road of Calle Los Mangos. This station has a permanent water supply tank that can be used by the residents to collect clean, drinking water in containers and carry it back to their houses, free of charge. But water is heavy and difficult to carry up the hillside, which is why most of the residents that are cut off of the AyA service have tapped into underground water wells to ensure water supply to their houses. Knowing that the water might be polluted by the old landfill's leachates, they use it mostly for showering, laundry, and running toilets, but not for drinking or cooking.

When I first visited Calle Los Mangos, my cellphone had no reception, as it turns out cell coverage from my service provider, *Kolbi*—which is part of the *Instituto Costarricense de Electricidad* (ICE), another state-owned and operated service entity—is virtually nonexistent in the area. Residents use private, foreignowned, telecommunication providers for their phone services such as *Claro* and *Movistar* which do cover the Río Azul area. Before the Central American Free Trade Agreement with the United States of America (CAFTA) came into effect in 2007, the Costa Rican state, through ICE, had exclusive control over all telecommunications across the country. Residents of Calle Los Mangos recall this time as a complete void of any form of telecommunication services, no phone landlines, no payphone, no cell coverage. As a direct result of CAFTA, the Costa Rican state had to give up the telecommunication service exclusivity and open up the territory to foreign companies, such as the ones that provide service in Calle Los Mangos.

Today, in Calle Los Mangos almost everyone has a cellphone, which is not only important for day to day communications, these cell phones are often the only source of internet in households where WhatsApp and Facebook are indispensable tools for transnational communication between the residents of Calle Los Mangos and those who are in Nicaragua. This particular situation reveals how the Instituto Costarricense de Electricidad (ICE) operates based on the idea that services should be provided to those who are included by the state, a form of citizenship-right. The telecommunication service vacuum can be seen

as a reflection of the state's acknowledgment that those that live in the area are not entitled to services provided by the state, despite having the economic capacity to pay for these services. When foreign, private telecommunication corporations entered the Costa Rican territory and decided to cover areas neglected by ICE coverage, telecommunication became a service, not a right tied to citizenship.

Even after the enactment of CAFTA in the country, the state has complete control of the country's water and electricity systems. By cutting out the residents of Calle Los Mangos from the possibility of paying for these services, they are excluded from formal contracts between them and these institutions. This exclusion is initially felt in everyday life as it conditions the ways in which migrants have to carry processes needed to sustain and reproduce life, and continues to exclude migrants from other processes that require verification or proof of residency. In Costa Rica, official utility bills are essential documents used to establish and verify residency. Without the possibility of having formal rental agreements, the absence of these bills is detrimental to gaining inclusion in other forms of services and systems. Therefore, we can place utility bills in the constellation of documents that make up the papered-based world of legality and formality.

These are some of the material conditions that make up Calle Los Mangos, conditions that are the result of state and non-state actors: the topology of Cerro La Carpintera, the Río Azul landfill and its lasting environmental sequels, complex and intricate relationships between local government and state institutions, the privatization of telecommunication services, the political expansion of the Christian evangelical church, illegal drug markets. This is the landscape of Río Azul, a borderscape that epitomizes marginalization by design. This is site where many undocumented migrants carry out their everyday lives as an orchestrated set of practices that enable them to reappropriate and work around the sociotechnical systems that make up the "the existential conditions of migrants who are always dwelling in the borders" (Mignolo 2000, p.xv).

In the next section of this dissertation I will use this setting to disclose the processes of knowledge production that result from the experience of dwelling in a Río Azul, a borderscape. These are experiences produced by a life conditioned by *bordering designs*.

CHAPTER 5. CONTESTATION DESIGNS: THE MATERIALIZATION OF OTHER LOGICS

The previously discussed bordering designs illustrate how these designs are a series of interventions scattered in everyday life processes intended to manage populations. These designs generate different degrees of state inclusion/exclusion for any migrant, while undocumented migrants often fall towards the exclusion side of this spectrum. In the face of state exclusion, undocumented migrants, resort to practices which can be referred to as "migrant counterconducts" (Inda, 2011) defined as "acts or forms of comportment that contest the criminalization and exclusion of the undocumented." (Inda & Dowling, 2013, p.3). These counter-conducts can range everywhere between organized political action such as protesting to everyday forms of resistance.

In the context of this dissertation, I wish to disclose how these counterpractices and interventions are marked by the possibilities of action afforded by other logics— such as the logic of informality, the logic of contestation, the logic of invisibility, the logic of autonomy. In engaging in these counterpractices, migrants are effectively designing for contestation. What these designs materialize is a tactical reversibility of power intended to contest state and state-delegated power. For undocumented migrants this means carrying out everyday life processes while being imposed a condition that actively and explicitly disallow these processes.

In this following chapter, I will present some findings from my interactions with undocumented migrants that evidence how migrants are able to subvert and reconfigure bordering designs intended to manage and control their bodily presence and practices in order to make up for state exclusion. My intent with this is to recognize how these forms of contestation are not just defensive, but actively offensive as these counter practices seek to expand possibilities of action and agency for those who are excluded from the state.

Throughout this dissertation, the materialization and configuration of these tactical interventions is what I refer to as *contestation designs*: designs that respond directly to bordering designs, that is the series of interventions and actions intended to 'cross' and subvert these bordering designs. These designs emerge from "the encounter with given realities (actualities, situations, circumstances, conditions or experiences)" that are materialized "in terms of their transformative possibilities and potentialities." (Dilnot, 2005). The kinds of design that I will show in the following sections of this thesis are forms of

design that emanate from the Global South that although might not be called design they are improvisational forms of design for survival and designs intended for autonomy (Escobar, 2018).

In the following chapter I will begin by introducing the figure of the border-crosser, that is the subjectivity that emerges from the undocumented migrant identity, from the processes of knowledge production that arise from inhabiting a condition of undocumentedness and by the acts of border-dwelling. I will introduce the practice of crossing *por el monte*, which is the system migrants—who lack authorization to move— use to cross into Costa Rica. It is a system made of orchestrated acts and interventions that actively seek to contest the nation-state border between the two countries and it is the site where most of the production of "illegality" takes place, it is the site where Nicaraguans gain the undocumented identity that will determine the conditions in which they have to carry out their lives inside the territory.

I will then introduce practices that emerge from the condition of undocumentedness, practices that can range from explicit forms of political organization intended aimed at contestation and resistance, to individual tactical actions intended to carry out everyday life against the state design's to disallow everyday life. These actions and the forms by which these materialize I contest are forms of design, design that follows other logics.

5.1 BORDER-CROSSERS: ALTERNATE SUBJECTIVITIES

The previous bordering designs framework (see Chapter 4) intended to expose how the logic of state power that generates population management technologies has effectively moved the site of border-struggles to everyday life. By use of these bordering designs, the border no longer resides along the edges of the nation-state, it has been imposed and imprinted on the body of migrants. Through the imposition of the undocumented condition and by inhabiting borderscapes, the body of the migrant becomes the site of border-struggles, which leads us to consider the phenomenological nature of alternative knowledge production by alternate subjectivities.

Foucault (1982) stated that "it is not power but the subject which is the general theme of my research" (p. 778), through this assertion, Foucault claims that his conceptualization of power is a means to understanding modes and operations by which human beings become subjects. Starting with the fact that subjects don't exist *a priori* but they are made and become subjects through the exercise of power, any analysis of bordering designs must not be exclusively centered on the mechanisms that materialize and configure power, it must also consider the production of alternate subjectivities. The bordering designs that embed the

logic of control and power generate particular possibilities of action that make up the migrant subjectivity while, at the same time forcing migrants' awareness of their imposed subjectivity and expecting them to perform accordingly. According to Foucault (1982):

"This form of power applies itself to immediate everyday life which categorizes the individual, marks him by his own individuality, attaches him to his own identity, imposes a law of truth on him which he must recognize and which others have to recognize in him. It is a form of power which makes individuals subjects. There are two meanings of the word "subject": subject to someone else by control and dependence; and tied to his own identity by a conscience or self-knowledge. Both meanings suggest a form of power which subjugates and makes subject to." (Foucault, 1982, p.781)

These alternate subjectivities emerge from forms of power that generate alternate human conditions, in this case, the attention is placed on the undocumented condition. In relation to undocumented migrants, the forms of state power that are exerted and materialized in the form of state exclusion, are designed to force migrants to recognize their own deviance which is what materializes in the undocumented condition. Foucault considered three modes of objectification, modes by which subjects are made:

"The first is the modes of inquiry which try to give themselves status of sciences; for example, the objectivizing of the speaking subject in grammaire générale, philology, and linguistics. Or again, in this first mode, the objectivizing of the productive subject, the subject who labors, in the analysis of wealth and of economics. Or, a third example, the objectivizing of the sheer fact of being alive in natural history or biology.

In the second part of my work, I have studied the objectivizing of the subject in what I shall call "dividing practices." The subject is either divided inside himself or divided from other. This process objectives him. Examples are the mad and the sane, the sick and the healthy, the criminals and the "good boys."

Finally, I have sought to study—it is my current work—the way a human being turns itself into a subject. For example, I have chosen the domain of sexuality—how men have learned to recognize themselves as subjects of "sexuality." Thus, it is not power but the subject which is the general theme of my research". (Foucault, 1982, p. 778)

These modes of objectivization are useful in understanding how categorization

of humans such as citizens and noncitizens are excised and legitimized by power. Bordering designs assume and embody "dividing practices" while excluding migrants from social processes, they are also responsible for making non-citizens aware of their non-citizenship through the exclusion of systems needed to carry out and reproduce life. These designs serve as technologies of division (Mezzandra and Neilson, 2013), technology that is used to underline separations between categories of difference. These categories of difference inevitably produce subjectivities that respond to the materialization of this difference.

In the case of migrants, these technologies of division create the points of tension where the practice of reinforcing borders — by dominant political interests aimed at dividing and excluding — meets the practices of border crossing — aimed at contesting this form of power and control. These are the sites of border-struggles. The remaining sections of this chapter will precisely focus on border-struggles and the production of subjectivities that carry out contestation designs.

"Writing of border struggles is for us a way of placing an emphasis on the production of political subjectivity. (...) We want the notion of border struggles to refer also to the set of everyday practices by which migrants continually come to terms with the pervasive effects of the border, subtracting themselves from them or negotiating them through the construction of networks and transnational social spaces. (...) Border struggles open a new continent of political possibilities, a space within which new kinds of political subjects, which abide neither the logics of citizenship nor established methods of radical political organization and action, can trace their movements and multiple their powers. The exploration of this continent, beginning with the material conditions that generate the tensions of which border struggles are the sign, seems to us more promising—and politically urgent—than the simple denunciation of the capacity of borders to exclude or the wish for a world "without borders." (Mezzadra and Neilson, 2013, p.14)

The subjectivities tied to the undocumented condition are (re)produced partly by the logic of struggle, struggle intended to contest a form of power that materializes in institutions; group and class dynamics; and, in this particular case, forms of power embedded in the bordering designs that mediate everyday life process. But these subjectivities are also related to other logics, logics that materialize in other kinds of designs.

BORDER-CROSSERS: BECOMING "ILLEGAL"

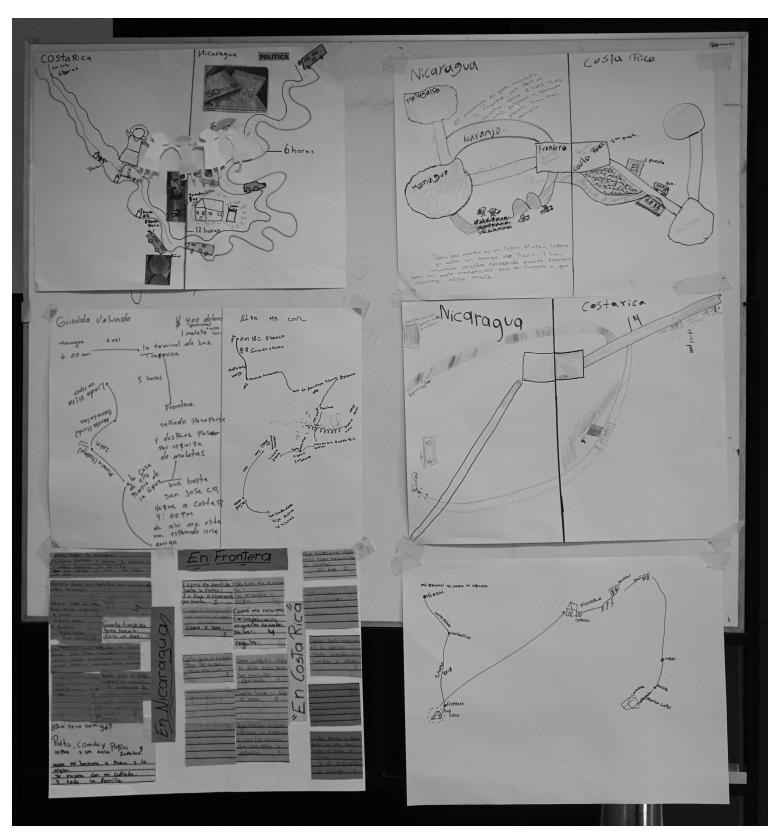
Most of the undocumented Nicaraguans I encountered throughout the two

years of research shared with me how they had crossed the border por *el monte*. *El monte* is a term that at first instance, describes the mountainous topography migrants— who lack proper documentation to cross the border— go through in order to escape migratory control. But actually, when migrants talk about *el monte*, the mountainous terrain is just one of the things they are referring to, the use of this term comprises a multitude of practices and systems that have emerged along the border as a direct response to undocumentedness: *coyotes*, *taxis piratas*, informal economies, food systems, bribes, they all make up a complex and articulated system of border crossing for undocumented migrants. In the context of undocumented migration, *el monte* is made up of a complex series of orchestrated practices of border contestation led by numerous actors.

While migrants use *el monte* as a mobilization strategy, *el monte* also affords the state the possibility of designating migrants' bodies as "illegal". It is in the act of crossing *por el monte* that these humans are then imposed the undocumented condition. *El monte*, for the state, is the site where illegality is produced, and for Nicaraguans, it is the site where they are forced to a new identity, this identity is the imposition of the border over their bodies. This identity and the differentiated possibilities of action that are conditioned by the undocumented identity subsequently generate alternate subjectivities.

The border that separates Nicaragua from Costa Rica is made up of 309 km extending from the Pacific Ocean to the Caribbean Sea. For the most part, it comprises a land border with the exception of the area where the border meets the San Juan River. It is an extremely porous border, with virtually no border infrastructure other than some strategically placed migration control posts and the infamous *la trocha*— a dirt and gravel road that stands as a reminder of Costa Rica's 2012 controversial and, subsequently failed border road project that was abandoned due to a high-profile corruption scandal that accused high-ranking government officials of mishandling funds intended to finance the project.

One of the *talleres comunitarios* I conducted for this research gathered 22 participants that had crossed the border at least once, of those 22 individuals, all but two of them had entered Costa Rica at least once *por el monte*. The *taller* took place in October 2019, the participants were asked to design maps of the journey they had gone through while they recounted their interactions with people, places, transportation systems, routes, etc. It was a session of visual storytelling through mapping, in which the maps were mostly used as a tool for prompting conversations about *el monte*. Families and relatives that crossed together worked together on the same map, participants that were on their own paired up with another participant and shared among them their border-crossing story.



Taller Cruzando la Frontera / Taller Crossing the border

All of the participants mentioned that despite not having the documentation that authorized them to cross the border, they had decided to move to Costa Rica informed by the expectation that moving would allow them to find better living conditions in Costa Rica than the ones they experienced in Nicaragua. The living conditions they described in Nicaragua were mostly derived from living in poverty, although three of the participants did mention the political and social unrest in the country since 2018 as the main reason for moving. In regards to the lack of documentation, all of them mentioned prohibitive costs associated with the documents they needed to cross the border and for setting residence in Costa Rica. The inability to cover these costs were the main motivation to consider crossing por el monte and not use the official migration control channels.

The decision to cross *por el monte* is usually informed by a multitude of factors. The cost of crossing the border through the proper migration channels is probably the main one. But there are some reasons that are more structural than material, for example obtaining a passport in Yamil's case becomes a bureaucratic nightmare, due to clerical error in his birth certificate, and in the case of Sofía, the Miskita migrant who was never registered at birth, it becomes virtually impossible since the basic requirement for a passport is a birth certificate.

For women, especially single mothers, the costs associated with moving using the proper channels can become impossible to meet with a single income when trying to bring their children along. Additionally, mothers need documentation that verifies that their children's fathers have granted them permission to move across countries. This system of child protection fails to consider that for single mothers who are raising children with absent fathers, this entails additional expenses as these women need to hire lawyers to track them down.

"Yo me tenía que traer a mi hijos, no los podía dejar allá, pero el papá nunca apareció. La verdad no sé donde está, se fue cuando la más pequeña tenía 1 año y ni un mensaje de texto ha mandado."

"I had to bring my children with me, I couldn't leave them there, but the Dad was nowhere to be found. I honestly don't know where he is, he left when my youngest daughter was a year old and he hasn't even texted me since"

— Cristina, a 24 year old undocumented Nicaraguan

Cristina, who is a mother of two recalls that when she decided to move to Costa Rica with her children she was unable to get locate and contact their father to get his permission to move them. She was then left with the only option to bring them across *el monte* despite her awareness that doing so would expose herself and her children to a dangerous and peril situation. This evidences how policy that is initially intended to protect children, fails to consider non-

normative family structures and by this omission, exposes children to threats and potentially reduces children to "illegals". Christina's sole form of resistance to this situation is to resort to crossing "illegally" through *el monte* with her two children.

Nicaraguans, generally speaking, can enter the country legally with a passport and resorting to one of two different forms of authorization: either with a work permit that allows workers to apply for temporary residency or with a consular (tourist) visa that allows Nicaraguans to remain—but not work—in the country for up to 3 months after every entry. In order to get a work permit, migrants must have a work offer or contract before entering the country and employers must submit proof of the contractual relationship and are often expected to cover the cost of the work permit.

Only one of the women that participated in the workshop, Doña Rosa, entered Costa Rica with a work permit and visa. She was hired to take care of an elderly woman in San José, she was offered minimum wage (about \$320 US), housing, food and healthcare (which is mandatory, but she was told it was a perk). All of the costs related to her visa and work permit were covered by her employers who loaned her the money she needed for bus fares and moving expenses, which was then docked monthly from her paychecks during the first year of employment. After two years of working for them she was laid off when the woman she was taking care passed away. She was suddenly unemployed and homeless. Her work permit expired shortly after that, which she was unable to get it renewed on account of not having proof of employment and not being able to afford the renewal fee. She is currently undocumented in the country, she rents a room that she shares with two other Nicaraguan women in Concepción de Tres Ríos and works as an informal vendor in downtown San José selling phone cases and chargers on the street. Doña Rosa is an example of how the conditions of migrant workers can change suddenly, rendering them "illegal" not by crossing the border unauthorized, but by the temporal validity of documentation.

Costa Rica has differentiated processes for applying for consular visas. For example, citizens from Argentina, Panama, Chile, Uruguay, Israel, the US, and the EU can enter and remain in the country for up 90 days without a visa; while citizens from Guatemala, El Salvador, Honduras, Belice, Bolivia, Taiwan, Venezuela, Turkey, Ukraine can enter and remain in the country without a visa for up to 30 days. Citizens from countries such as Nicaragua, Colombia, Ecuador, Dominican Republic, India, Pakistan, Saudi Arabia, and other 70+ countries, need to apply for a consular visa that allows them to enter and stay in the county for 30 days with the possibility of renewing it for up to 90 days.

For Nicaraguans, the cost of a consular visa adds up to \$35 US, the visa itself

costs \$32 US and there is a \$3 US charge that covers the appointment for the mandatory interview at the Costa Rican consulate. In addition to these fees, there are hefty requirements to be considered for a visa; for a single entry visa a person must submit an application filled out with personal data plus specific information regarding specific future travel plans which include a return ticket. An applicant must also provide proof of economic solvency during the time the applicant intends to remain in the country and a criminal background check. The process for getting a visa is both expensive and time-consuming for Nicaraguans and the perception is, at least from the workshop participants, that it is rarely approved.

"No, yo no pedí una visa, no me parecía una buena opción. Hay que pasar mucho tiempo consiguiendo papeles para que al final te digan que no. (...) Además, para qué quiero yo una visa de turista si no voy a pasear, yo lo que quería era trabajo" "No, I didn't apply for a visa, I didn't think it was a good option. You have spent a lot of time trying to get together all the documents and in the end, they'll say no. (...) Besides, why would I want a tourist visa if I'm not going to go sightseeing, what I wanted was a job."

—Ana Lucía, a 37 year old undocumented Nicaraguan

For economic migrants, applying for a consular visa doesn't really make sense. First, there is a shared belief that the porosity of the border offers more possibilities than the rigidity of bureaucracy. And second, it is an expense that (if granted) only ensures you safe passage into the country but does not authorize workers to reside in the country. Third, there is a perception that it is even worse to overstay a visa than entering *por el monte*.

—"Te conocen" ["They know you"]

Who knows you? I ask

—"El sistema, quedás registrado en el sistema que entraste y que nunca saliste. Yo por eso siempre prefiero venirme por el monte" ["The system, you are registered in the system and they know you came in and never went out. That's why I always prefer to come por el monte"]

—Ana Lucía, a 37 year-old undocumented Nicaraguan

This brings us to the issue of invisibility. In the context of "illegal" migration, visibility is often associated with empowerment and invisibility with powerlessness (Papadopulos and Tsianos 2008). I would like to argue—in an age of increased surveillance and from the experience of migrant women—that invisibility is a means by which they can contest sovereign power, and this should not be seen in terms of powerlessness, but quite the opposite, invisibility is tactical, a response to the institutional production of illegality. The informal

networks that make up *el monte* develop complex strategies aimed to counter "the grandiose, exquisitely visible spectacle at territorial borders" (De Genova, 2013, p. 1183). In this sense, these women are carrying out practices designed by the logic of invisibility.

"Yo no soy illegal. ¿Cómo voy a ser illegal si no existo para ellos? No saben quien soy"

["I am not illegal. ¿How am I illegal if I don't exist for them? They don't know who I am"]

—Ana Lucía, a 37 year old undocumented Nicaraguan

For some migrants, crossing *por el monte* offers them the possibility of contesting this "illegality" by becoming invisible. For many undocumented migrants, the moment they decide to cross *por el monte*, is the moment a series of tactical practices informed by the logic of invisibility initiates. In this case, invisibility is not something that is imposed by state power, but it is something that is assumed because it is tacticly beneficial: for the migrant invisibility becomes political. These practices based on the logic of invisibility are not exclusively bound to the territorial border, they extend into their everyday lives as forms of contesting the proliferation of governing and bordering designs that are located within the nation-state territory. For some migrants the entire time they reside in the receiving country is articulated by practices informed by the logic of invisibility,

Women who cross with their families often cannot afford to get passports and visas for all of their members so they cross as a group and they pay the communities of houses and vendors along the border that provide shelter and food, but also provide about information such as directions, the best times to cross through certain trails and, even the names of the migration officers that are likely to take bribes and help migrants cross. Women who decide to make the trip on their own usually hire a coyote at least they do the first time they cross. They believe that traveling alone puts them in a more vulnerable position so they try to find a coyote that already has a group of migrants and hope that traveling in a group will provide them some degree of security.

María, a 38 year old undocumented Nicaraguan, mentioned that the first time she crossed the border, she hired a coyote and spent the entire time paying close attention to what he was doing, she had a small notebook where she discreetly took notes of the houses and the vendors that he used along the way, she wrote down every single name of everyone who aided the group along the way, she registered the names of the migration officers he paid off, and she mapped the trails they took. She told me she did this because she was planning on going back for her children as soon as she could save up the money and she

was planning on becoming "la coyota de su familia", her family's coyote. The term coyote, at least in Costa Rica, is usually used to describe a person who smuggles migrants, a smuggler. The moment María uses that term to describe herself, she is positioning herself in the realm of illegality and illegal practices, yet she doesn't see it that way. For her, assuming that role is affective in nature as it is intended to reunify her family, the logic that informs María to become a coyota is that of a practice of care, not illegality.

CROSSING THE BORDER AS A RECURRENT EVENT

Crossing the Costa Rica-Nicaragua border is not a unique experience, in fact all the adult migrants I encountered throughout my research had crossed the Costa Rica-Nicaragua border more than once, for a couple of them it had even become such a common occurrence that they couldn't recall precisely how many times they had crossed. Family ties in both countries make the crossing of the border a regular event for many undocumented migrants. These ties are not cut when migrants move, instead, migrants sustain the multitude of physical and virtual transnational spaces and practices that are articulated between the two countries. Most migrants consider that it is better to migrate to Costa Rica than the U.S. because they have the possibility of visiting more often and "se siente más cerca", ["it feels closer"].

"Díay, yo preferí venirme para acá [Costa Rica] porque ya estaba acá una vecina y por el idioma también y porque es más fácil volver [a Nicaragua] a ver a mis hijos" ["I chose to come here [to Costa Rica] because I knew an old neighbor that was already here, and because it's the same language y because it's easier to go back [to Nicaragua] to see my children."]

—Ana Lucía, a 37 year old undocumented Nicaraguan

The proximity that migrants mention when they decide to move to a neighboring country is not only a physical and territorial proximity, it is also referring to a cultural one since important cultural aspects are shared between the two countries such as language.

Like most territorial borders around the world, the border is used to "differentiate, sort and rank between those to be excluded in fact (deported) and those to be included (even if only as 'illegal' migrants)" (De Genova 2013). In a country like Costa Rica— where there are limited resources for deportation infrastructures— once inside of the country there is the perception that a person is unlikely to get deported. For migrants this perception is not unfounded, it is informed by years of Nicaraguan migrant experience that supports the claim of the territorial border as the site of potential deportation (physical exclusion) and the territory as the site of other forms of exclusion, mostly social and economic.

In conversation, when I asked migrants what were some things they would like to change about their neighborhoods, the thing that came up the most was that they would like to see more police and policing around their houses. An unexpected answer but it actually supports the belief that Costa Rica is not a country that deports migrants. That response is mostly reflective of the kinds of neighborhoods in which they live, most of them have large organized groups and gangs that are highly territorial and deal and distribute drugs.

One of the women that participated in the mapping workshop, María Luisa, a 54 year old undocumented migrant, mentioned that after she crossed the border, she took a bus that was headed to San José and about 30 minutes after boarding the bus they got stopped by immigration officers. The officers boarded the bus and asked everyone in to show *sus papeles* (their papers). Since she, her 16 year old daughter and three month old granddaughter couldn't provide documentation they got taken off the bus. As the bus left, the officers told them that if they wanted to stay it would cost them; they gave the officers all the money they had which was about \$50 US. The officers left them there in the middle of the road. A truck eventually drove by with a man who was driving to San José who gave them a ride to the city free of charge.

Apart from family reunification, another reason that makes crossing the territorial border a recurrent event is related to the process of *becoming* and *unbecoming* "illegal". Visa holders, for example, routinely cross the border every time their visa is about to expire. Crossing the border becomes a strategy that affords legal presence in the Costa Rican territory, although they might be infringing on other aspects of the migration legislation by working without authorization. But this is a rare practice among economic migrants given that visas are difficult to obtain and if they do manage to get their visas approved, renewing a visa and traveling to the border every month is also costly.

What is quite common, is the need to cross the border in order to obtain documentation required to regularize their migratory status in Costa Rica, which was the case of Yamil and most women I engaged with during the past two years. In a final attempt to gain the possibilities for state inclusion migrants often practice unauthorized border crossings in order to secure the papers they need for regularizing processes. The strategy for 'unbecoming illegal' stems from "illegality" in itself. This immediately reveals two critical issues in the context of this research; first, it effectively delegates the power of the border in terms of state inclusion/exclusion to the systems of information and population management rather than to the territorial border. Second, it allows us to see practices that emerge and are driven by other logics, when a person is conditioned to live under a system of "illegality", then objects, practices, systems, and infrastructures of illegality emerge to afford possibilities of action that operate under other kinds of logics—the logic of invisibility, the logic of

informality, the logic of forgery, the logic of solidarity, etc.

5.2 REDES DE SOLIDARIDAD: UNVERIFIABLE PRESENT, SHARED FUTURE

On October 13, 2018 the first caravana migrante [migrant caravan] departed from San Pedro Sula, Honduras with 1,300 people, by the time the caravan had reached the Mexican border a few days later up to 6,000 migrants were headed towards the U.S. border. What brought together this group of migrants was a shared goal to migrate North. Some wanted to apply for asylum in Mexico, but most wanted to reach the U.S. These 6,000 people—coming from Honduras, El Salvador, Guatemala, Nicaragua; men, women, and children— all had in common that they were all bodies that had been deemed undeserving to move and faced the same restriction over their movement. As such, bodies like these are conditioned to move through channels that expose them to potential situations of danger and exploitation. In an attempt to counter these risks, tactics of collective contestation emerge and organize from the ground. Since that initial caravan, several more of these massive caravans have formed in an attempt to collectively cross borders. These Central American migrant caravans expose is how collective contestation practices are becoming more and more complex and orchestrated in response to increased securitization of border and migrant control. These are a form of organized political action centered on the power of numbers that uses visibility as strategy to counter and contest the criminalization imposed over the movement of their bodies: bodies that have been historically excluded from the politics of mobility are now able to claim their presence over several transnational spaces.

What bounds the bodies that make up these massive caravans is a shared identity based on mobility restriction and a shared goal of border contestation. Migrants engage in bounding processes that are fundamentally different from bounding identities as a strategy for nation-building processes. Benedict Anderson's (2016) *Imagined communities*, explains how the sense of belonging to any group is a product of imagining and drawing the boundaries of each group (or even nation). The strategies for achieving this are diverse, but they all produce cultural practices and objects that bond very different members under a common imagined community and therefore it creates a sense of belonging with people that might never even meet. What the migrant caravans show is that the forms of bounding in which migrants engage escape national identity bounding and respond to shared identities based on current needs. In the specific case of migrant caravans, the bonds they create respond and materialize to a logic of collective contestation.

The women that participated in this research, also engage in bounding practices

that effectively materialize in the form of the grassroots organization Vínculos. The official intent of this organization is to generate political actions aimed at changing migration policy in Costa Rica. They do this through a number of avenues, they engage in public manifestations and protests claiming labor rights and state protection for undocumented domestic workers. They generate research and reports that showcase the experience of undocumented women to policy makers in the Costa Rican government. As an organization they collectively use visibility as a form of political action intended to generate future changes for them and for undocumented women to come.

What is interesting to note is that while they are exerting organized political action intended to potentially generate change, they simultaneously engage in practices intended to develop common strategies to bypass structural barriers in an effort to improve their living conditions and fulfill everyday life needs. Consequently the bounding practices in which these women engage allows for the formation of alternate ways of accessing services that would otherwise not be available for them. This is particularly important in services that allow everyday life to unfold such as housing, education, and healthcare. What is at heart in their weekly meetings is sharing with people that are going through similar experiences to allow migrant populations to build new ways of living while incorporating aspects of everyday life from their origin country.

These bounding practices are able to generate networks of solidarity, redes de solidaridad. These networks are made of complex relationships that on one hand are bound by a common present identity, which is their undocumentedness and gender identity, and on the other hand these ties are bound by the prospect of a shared possibility of state inclusion. This informs a series of practices that originate from different and often opposite logics. The forms in which they contest state power at present are in many ways shaped by the logic of invisibility, while they engage in practices informed by the logic of visibility in order to secure a better future.

For the organization members, the bounding practices they engage in through Vinculos have resulted in longer-lasting bonds than what they have been able to establish with the Costa Rican state. As mentioned before, many of the Nicaraguan women have fallen in and out of documented migratory status, depending on their own possibilities of providing verification. And so, the networks of solidarity that are assembled within the organization have fulfilled gaps and voids left from state exclusion. The women that are currently documented use their documentation to leverage those left undocumented, they are able to materialize these practices of solidarity in the form of taking out loans and credit on their behalf.

Other practices do not depend on documentation and are mostly related to

care practices, caring for children and elders, providing housing and food for newly arrived migrants, and sharing their employer's networks for potential job sources.

Victoria, a 47 year old undocumented Nicaraguan, shared with me the story of when she once took her friend's son across the border to Nicaragua. She was going to travel with her own children to visit her mother and she was asked to take a 17 year old teen to Managua so that he could get the copy of his birth certificate needed to apply for his first passport. Victoria crossed an international border with an undocumented and unidentifiable minor that was not related to her. She did it despite knowing that if they got caught crossing por el monte together she could get criminally charged with human trafficking. I asked why she did it even though she knew it is considered a serious criminal act, to which she told me that she would rather have him cross safely with her family like he was one of her own children, than expose him to the risks of crossing alone.

What the previous situation proves is how the formation and composition of migrant families usually disrupts and challenges the normative models of what a family is. Complex social networks are weaved among migrants challenging the "natural" (socially instituted and law-backed) ordering of kinship solely based on blood-relationships. Beyond genetic relationships, ties forged on practices of care are common among migrant and mixed families, establishing genealogies of care that fall out of the state imposed idea of a family. Among undocumented migrants, these relationships of care become critical for fulfilling institutional gaps left by state exclusion. And while state exclusion generates some of these relationships it further excludes them by systematically failing to recognize the validity of these non-genetic relationships.

These networks of solidarity are also able to transcend the nation-state border, relationships and systems of support extend in ways that contest the artificially imposed separation between the two countries. Another migrant told me about the time her Nicaraguan ID had expired and she needed a valid one to get her passport renewed in order to travel to Nicaragua to spend the holidays with her family. This was about ten years ago, before Nicaraguans could get their IDs at the consulate in San José. She then asked her twin sister to impersonate her at the Nicaraguan Registro Nacional office and get her a new ID. Her sister mailed the ID a week later. For both these women what they did was not illegal, it was something that needed to get done, it was a tactical response to the temporal inscription in the validity of documents. In this given moment, the logic of solidarity transcended any other logic of practice, her sister performed this action knowing that it was the way she could resist becoming "illegal".

5.3 THE EVERYDAY AS MICRO-POLITICAL ACTS

In my descriptions of Calle Los Mangos in Chapter 4, which were informed by my experience with the place and stories I heard from the women that live there, it is possible to see how the marginalization experienced in the place is sustained by design. It is by design that the place is incredibly difficult to access, with only one bus line that runs infrequently along the main road that leads to Calle Los Mangos. Due to the pronounced topography of Calle Los Mangos and the narrow road that provides the sole access to the neighborhood, large vehicles such as buses and garbage trucks cannot enter the neighborhood. The environmental and infrastructural characteristics of this place make everyday life a series of daily strategies, tactics and acts of resistance that seek to contest bordering designs; in this case understood as designs intended to sustain marginalization and keep those who inhabit Calle Los Mangos — poor and undocumented migrants — confined to a site that (re)enforces cultural difference and class politics.

For women who work as domestic cleaners and caretakers, their everyday lives are split between their own family lives in Calle Los Mangos and their employer's family in neighborhoods of more economic solvency. These women have to navigate these neighborhood in performative ways, switching their everyday clothes for service uniforms, carrying small bags to deflect accusations of stealing food when they leave the homes where they work, they they learn how to make food with ingredients they can't afford to buy for their own families, they use cleaning supplies that smell different from the ones they are used to, and they perform the routine that is necessary to fulfill their job.

SANDRA

Sandra, a 42 year old undocumented Nicaraguan, leaves her house in Calle Los Mangos every morning before 4:30 am in order to make it in time to the bus stop to grab the 5:00 am bus headed to San José. She arrives in San José right before 6:00 am where she takes a second bus headed to Tres Ríos where she has been a domestic worker for the same family for the past seven years. She usually packs a light breakfast or snack for the security guard that works the evening shift at the entrance of the gated community, whose shift ends at the time her's begins. They've befriended each other from these brief morning interactions and first bonded over the fact that they are both from León, Nicaragua. She brings him a snack out of solidarity because she knows he is hungry from having to work the entire night shift.

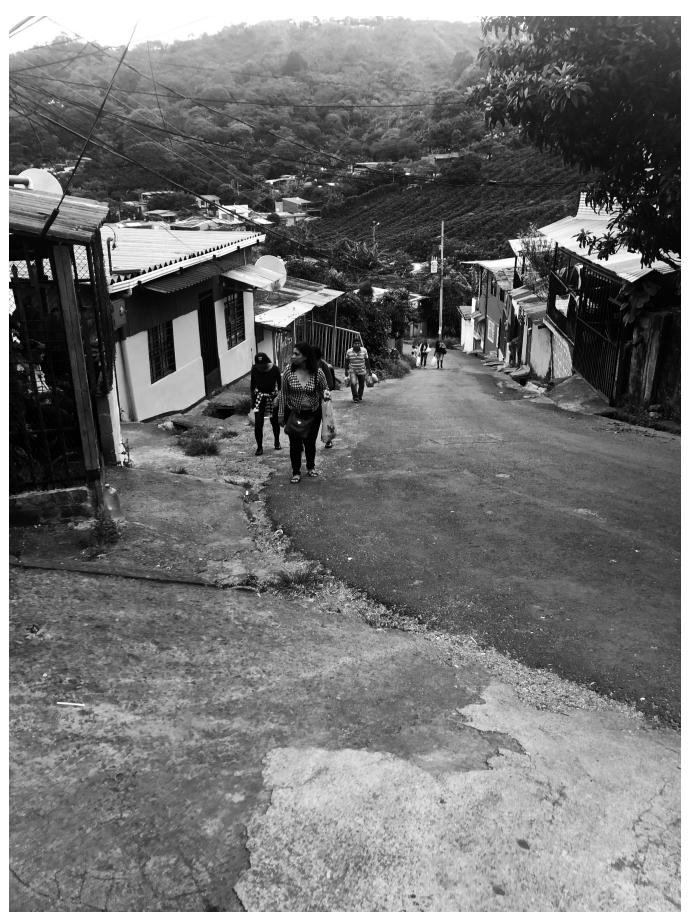
Sandra walks into her workplace before 7:00 am, takes a couple of minutes to settle down, uses the restroom and then starts preparing breakfast for all of

the family. After they have all eaten and the children have gone off to school and the adults leave for work, she sits down and has some breakfast of her own. After washing the dirty dishes and tidying up the kitchen, she then starts picking up the bedrooms, making up the beds, and cleaning up the bathrooms, followed by the daily laundry load. At that point she sweeps and mops all the indoor floors, and saves the terrace floors for last. By the time she's done, it's lunchtime, so she looks around for some leftovers in the fridge which she heats up in the microwave and takes an hour-long lunch break. She sits down at the table in the service room where she has a small TV set and watches the news while she eats. After resting for a bit, Sandra starts preparing lunch for the kids that are dropped off by the school bus at 3:00 pm. She makes sure both of them eat and lets them watch TV for an hour before they have to start their homework. Her job during the afternoons consists mostly of looking after the kids until their parents return and making sure dinner is ready by the time they get home.

If it's a good day, the mother will come back before 6:00 pm but usually she has to wait until 6:30 pm to leave. When her workday is over, she walks a couple of blocks to grab the San José bus. She debords the bus in downtown San José and on her way to the Quebradas de Río Azul bus stop, she usually stops by *el chino* [a small store that gets its name from being owned by a Chinese person] to pick up some groceries or anything she needs at home because it is significantly cheaper than any of the stores in Río Azul. She then walks over to the bus stop and boards the bus that will take her home. She gets off the bus at the end of the bus route so she feels comfortable falling asleep without having to worry about missing her stop. She makes her way up *la cuesta* [the slope] of Calle Los Mangos and gets home past 8:30 pm.

LA CUESTA AS SPATIAL AND TEMPORAL MEDIATOR

The materiality of *la cuesta* [the slope] of Calle Los Mangos, becomes a critical articulation of time and space for those who dwell in this space. Infrastructurally, it is the spine from which networks of systems, practices, and possibilities are interconnected and articulated; it is also the only way in and out of the Calle Los Mangos neighborhood. The physical effort it takes to go up and down *la cuesta* embodies different practices of care: going up the slope offers the possibility of reaching home and family, going down the slope offers the possibility of generating the material conditions to sustain home and family. The physical burden of moving around this terrain is evident in the women's bodies, they all mention knees and joints aching from making their way down the abrupt incline, pains in their lower backs from carrying infants up and down the slope, discomfort in their shoulders from lugging around buckets and bottles of water, their bodies are slowly being shaped by the terrain they have to navigate.



La cuesta of Calle Los Mangos

Most of the women are strategic about the number of times they go up and down the hill, if they have a job they'll use their daily commute to stop along the way and get groceries or add funds to their prepaid phones. If they have to head down to San José they'll plan a single trip that covers most of the errands they need to get done. *La cuesta* becomes a spatial and temporal mediator between Calle Los Mangos and the outside, effectively gaining the status of a bordering device; one that's permeable but manages the flow of migrants in and out of the borderscape.

La cuesta is just one of the many environmental and infrastructural mediators that modulate time for those who live in Río Azul.

ANA MARÍA

— "Me llamás cuando llegués al Ebáis." [" You call me when you get to the Ebáis."]

This was the only instruction I got from Ana María, a 36 year old undocumented Nicaraguan, to meet her on a Friday afternoon in Linda Vista de Río Azul. I called her as soon as I got there and about 15 min later she came to meet me while she was carrying her 3-year-old daughter pressed against her hip. She told me that she was going to take me back to her place, we went around the Ebáis where a number of *trillos* [narrow paths marked by the muddy tracks that cut across the overgrown grass] branched out, we took the middle one and made our way down the hill circling around rectangular cells of five to six houses until we finally arrived at the opening of a long-narrow stairwell that went further down the hillside. We reached her house after going down a total of 77 makeshift, irregular, dilapidated steps. Ana María's house is the last one down of this [unnamed] stairwell, where there are thirteen other houses lined up on both sides of the stairwell.

"Yo me siento segura en mi hueco." ["I feel safe in my hole."]

She tells me about how much she likes the isolation of her "hole" because it's quiet and keeps her family away from the drugs that run heavily on other streets are easier to access. Her neighbors have a communication system that lets each other know when someone they don't recognize is coming down the stairwell, it basically consists of yelling "Viene alguien" ["Someone is coming"] from one house to the next. The yelling stops until someone is able to vouch for whoever is coming down. The good thing about being the last one is that she has no one left to yell at, and just in case she keeps a large wooden slab covered in nails and spikes next to her doorway to scare off any intruder, which she shows me jokingly.

Ana María has four children, the toddler I met that day, one that attends



One of the many stairwells of Calle Los Mangos



Access to Ana María's house

elementary school and two that are high school students, all of them were born in Costa Rica. Ana María walks her daughter every day to and back from school, in the mornings they both go up the stairs, they walk about 250 meters down the road to the Linda Vista elementary school and then she goes all the way back just in time to walk her other two boys up to the bus stop across the street from the Ebáis so that they can go to their high school in Desamparados. She then comes back down the stairwell to tend to her mother and youngest daughter.

Ana María arranged for her mother to join them in Costa Rica after the April 2018 civil unrests in Nicaragua made her mother's home town one of the most violent epicenters of the protests. Her mother is completely paralyzed from the waist down, she used to have a wheelchair but for the past year, she has been mostly bound to her bed. Bringing her to Costa Rica was a feat that required the help of several cousins back in Nicaragua to get her across the border. She came in through with her passport and a consular visa that allowed her to visit her daughter for a month, but the visa has now expired and she is currently undocumented. All of Ana María's neighbors helped carry her mother strapped to a gurney down the stairwell when she first arrived, it took them more than half an hour to get her settled in. Ana María tells me that she is certain that the next time her mom will ever leave the house will be the day she dies. After she feeds her mom some lunch, she goes up the stairwell and heads down to the school to pick up her daughter and they both make their way back home. After she feeds her daughter some lunch, she goes up again to meet her sons at the bus stop and they all go back down where she has lunch ready and waiting for them. The afternoons are quiet, she helps out whoever needs to do homework and they all watch some TV before getting dinner in time for when her husband arrives from work.

Ana María goes up and down the stairwell at least four times on a regular day. She knows exactly the amount of time it takes her to go each way, three minutes to go up and about two minutes down, and then another five minutes walking along the *trillos* to get to the main street when it's not raining. When she is planning out her day, she mentally adds two minutes each way when it rains because the steps and the road get muddy and slippery so she needs to be extra cautious. Going up and down the stairwell becomes instrumental in how she measures time throughout the day. Her everyday life is to a great extent mediated by the 77 steps and the maze of muddy *trillos* that allow her the possibility of moving in and out of her house and accessing public infrastructures, such as the bus stop and her children's schools.

While Ana María finds comfort in her isolation, the same isolation generated by the terrain and the lack of accessibility effectively confines her mother to what will be her deathbed. The stairwell that Ana María equates with protection, reduces her mother to a life conditioned by near absolute exclusion. Therefore, different positions emerge from different embodied possibilities in relation to the same material conditions and topography.

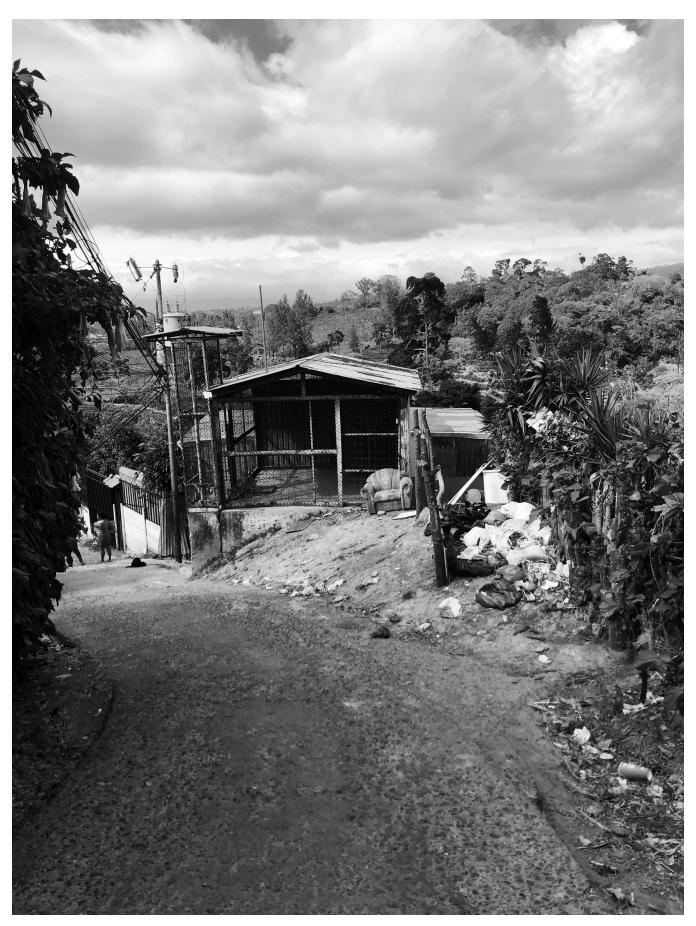
I asked her if she had the possibilities of one day relocating to another house and she claims she does but has always preferred this one because of the sense of safety it gives her. In a sense it does allow her to carry out her everyday life within the possibilities of invisibility, the "hole" keeps her out of the public view. And, although she's aware that her house is situated in a landslide-prone site, she still considers it to be a safe place, leaving me to interpret that for her the social sphere is seen as a greater threat in her everyday life than the lurking environmental threat.

YESSENÍA (part 2)

Yessenía lives up the main road of Calle Los Mangos, her house is past the AyA¹ repumping water station right after the paved street makes a sharp, steep right turn and turns into a narrower unpaved, dusty road. Her house is located in one of the more elevated areas of Río Azul, where there is no access to drinking water other than the water available at the repumping station. About fifteen years ago, her parents—who have now returned to Nicaragua to live out their retirement and left the house to Yessenía—dug up and hooked up the house to a well that taps into an underground water supply. The well provides running water in their house that they use for showering, for flushing the toilet, for laundry, and for cleaning. In the past, Yessenía would boil the water and use it for cooking and drinking, until two men that work for AyA came over her house to tell her about the health risks related to intaking water polluted by toxins and chemicals that over time have leached from the old landfill into the subsoil and underground water sources.

Ever since that day, Yessenía fetches drinking water from the AyA repumping water station. She heads down the road with three empty 2.5 L plastic Coca Cola bottles that she fills up and carries up the road back to her house. If she's lucky she only has to do one of these runs a day. She used to be able to carry a couple more bottles, but to do so she had to leave her son alone at home. When he has a baby, she would leave him napping in his crib during the fifteen minutes it would take her to fetch the water, as he grew and began walking it was harder for her to leave him unattended even for a little bit. One time she needed water to prepare lunch for both of them, so she locked up the house and left her son there thinking it would be fine, but it turns out that her son cried and yelled the entire 15 min she was gone, alarming the neighbors. When she returned,

¹Acueductos y Alcantillados, the state-owned institution that has exclusive management of the water and sewage systems and supplies all water services in the country



AyA Repumping Station of Calle Los Mangos

an older male neighbor told her that if she ever left him alone again screaming like that he would call the PANI (Patronato Nacional de Infancia, The National Child Welfare Agency) to report her. Since that incident, she takes her son with her every time she needs water.

EVERYDAY ACTS OF RESISTANCE AND CONTESTATION

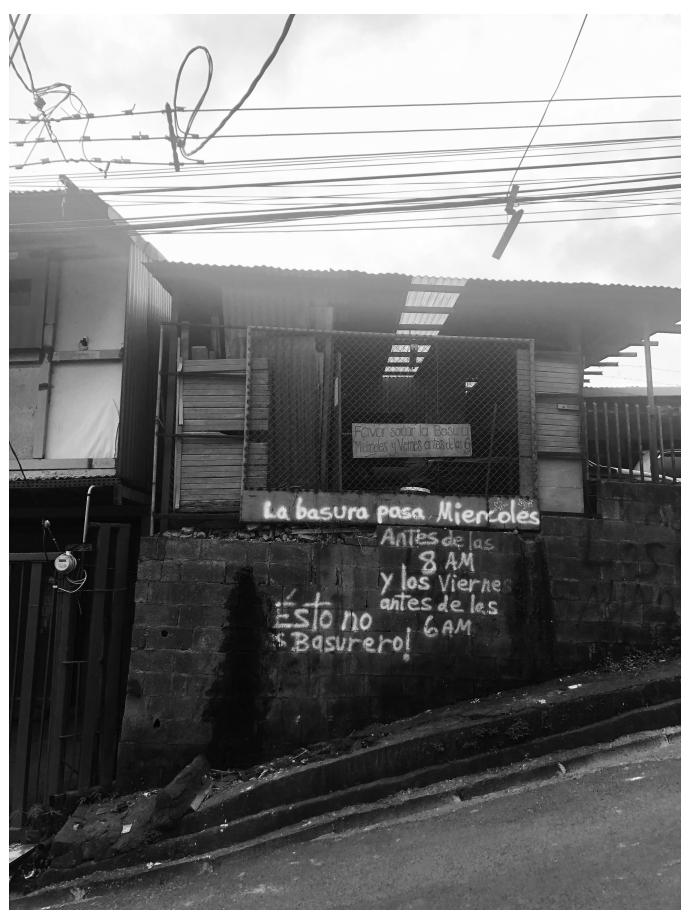
In all these situations, what needs to be noticed is that there is no instance where they are acting out in an explicitly illegal manner, these practices are considered illegal only because the bodies that are performing these acts have been rendered "illegal" on account of their undocumentedness. Sandra works while she does not have work authorization; Ana María lives in a house that was built with no formal planning and permits; Yessenía leaves her son unattended in order to provide clean drinking water.

These women engage in practices that have been designated as "illegal" or unauthorized in order to carry out processes needed to reproduce life for them and their families. Their everyday lives are articulated by a series of acts that resist and contest designed efforts to disallow life. They are not engaging in conducts that are politically organized, but their tactics are political in nature; their unauthorized presence is a political act that contests migratory control.

5.4 MATERIALIZING INFORMALITY: AFFECTIVE INFRASTRUCTURES

The divide between informal and formal is somewhat related to the conditions of un/documentedness, but they are not exclusive to each other, meaning an undocumented migrant is not necessarily confined exclusively to practices and infrastructures of informality. In fact, almost every human navigates formal and informal structures in their everyday life. But undocumented migrants are conditioned to carry out most of their everyday life process under structures and practices of informality. This is a direct consequence of state exclusion, state inclusion being the prerequisite for formal structures and systems. Informality and undocumentation are critical instrumentalizations of state power intended to produce "illegality", conditions that are (re)produced by state bureaucratic practices.

While un/documentation is produced, reproduced and sustained by bureaucratic and population management systems, one cannot speak of un/documented regimes of practices, it is a designation used to categorize bodies and order populations. However, these categorizations imply differentiated possibilities of action, actions that fall into different logics of practice. In/formality, on the other hand, does refer to systems and regimes of practice that involve state



Signage in Calle Los Mangos

and non-state actors, whole infrastructures, economies and markets, places, and situations. Just like un/documentation, the duality of in/formality, from the state perspective, is an instrumentalization of control: formality is used to describe all practices that fall under the state's control and informality as those practices that operate in the margins or outside of state control. In this research, I will consider informality as a logic of practice that is produced by the state and performed by those that operate in the margins or outside of the state's control, a population that includes a variety of forms of state exclusive beyond the condition of undocumentedness.

In this dissertation, informality is considered a part of the logic of state control and as such it is a product of state design, here are some of the reasons why I consider informality to be designed:

- 1. Informality is a co-product of formality
- 2. Informality is the product of a designed organizational and management system made up of legislation and bureaucratic practices
- 3. Informality is part of a designed system that produces mass and systemic precariousness (in the form of cheap labor)
- 4. Informality is materialized and reproduced by an infrastructures of informality: architecture, urban planning, policymaking, public services, education, food, etc

Formality and informality coexist everywhere at all times, in a place like Calle Los Mangos both systems concur in plain sight. The place that sells second-hand goods provides shade for the police officers that are often stationed along the street. Police presence is not a rare occurrence here, in fact, the neighborhood is highly patrolled by the police. Officers, though, are not looking for undocumented migrants, in fact, none of the women I talked to ever had the police ask for their *papeles* in Calle Los Mangos. The police are there to patrol and dismantle the illegal substance and drug markets that have proliferated there in the past years. Quarrels among the different gangs have made the neighborhood a dangerous and insecure place for most of the people who live there.

Although the police are mostly there to stop the flow of drugs from spreading into other neighborhoods, police are seen as a respite from the constant threat of danger by most women and children, who, despite being undocumented wish there was a heavier and more constant police presence in the area. This, again, can be seen as a reflection of the country's lack of deportation infrastructure that makes deportability only a real threat for subjects that are directly involved in criminal activities.

AN EXTENSION OF THE BODY

Being-in-the-world under conditions of undocumentedness, inhabiting a body that has been designated "illegal", necessarily generates particular practices and materialities that are determined and conditioned by the possibilities afforded by such condition, pointing out to the ontological relationship between the body and the environment. Everyday life for an undocumented migrant is mediated by state exclusion, but state and social exclusion do not strip away migrants' agency; on the contrary, the lack of possibilities of accessing formal contracts and structures leads to a proliferation of tactical practices that operate under the logic of informality in order to fulfill the needs left from the exclusion of formal systems. Bodies that designated "illegal" develop particular subjectivities from the interactions and situations that emerge from the condition of undocumentedness. Undocumented women that live in Río Azul, live there because the nature of an informal dwelling allows for the possibilities of arranging relationships that are not dependent on formal contractual structures.

For instance, the lack of formal construction plans and blurred territorial lines between plots in Calle Los Mangos enables migrants to modify the houses they rent. By engaging in practices that fall into the "ingenious spectrum of illegal additions" (Davis, 2006, p.48), migrants are able to phase out the costs of modifying their houses and materially respond to changes in their family structure and kinships; such as having more children, new marriages, partnerships between families, bringing children and relatives from Nicaragua to live with them, etc.

In accordance to what anarchist architect John Turner once noted, "housing is a verb" (cited by Davis, 2006, p.27); these women and their families engage in practices of solving complex housing problems on an everyday basis such as supplying drinkable water where there is no water service, coming up with strategies for rain mitigation in a place where torrential rains are common during half of the year, securing forms of outside lighting at night in a place where public infrastructure is lacking. They optimize the cost of rent by merging families under the same roof, they reinforce the structure of their shelter after every storm, they add and transform spaces depending on changing needs. The informality in which they are conditioned to live in, allows them to engage in incremental, building improvements by effectively becoming their own designers and architects, a possibility that would not be afforded within formal settings.

(RE)CONFIGURING "THE ARTIFICIAL"

If we take the previously elaborated conceptualization of design understood as the selection, materialization and configuration of logics (Chapter 2), it is possible to understand the practices that emerge from encounters with what is given in order to change one's possibilities of action as design. Undocumented migrants engage in these practices in order to adapt the environments in which they inhabit, which in the case of Calle Los Mangos it is shaped and materialized by state omission and infrastructural neglect. Women that live here change their environments in ways that help them, their families and often the extended community.

Claudia, a 28 year old undocumented Nicaraguan that moved to Calle Los Mangos not even a year ago, lives in a small two-bedroom house with her partner and two small children that they rent for \$150US a month. When they first moved into the house, they did not have running water or electricity service. Following the recommendation of her neighbors, she hired a local man that could provide her with power and electric service to her house. He tapped into the main electric and power lines that run along the main street of Calle Los Mangos and was able to hook her house to the main electric wires. She tried going through the proper channels to get the service installed in her house but she wasn't able to gather the requirements the electric and power company asks for any new service. Paying this man for this service was for Claudia the way she was able to secure electric power to her house.

Within a couple of weeks of moving there, Claudia noticed how the narrow road in front of her house lacks any form of street lighting making it really hard and potentially dangerous to get home for her and her neighbors at night. She got herself a reading lamp that had a flexible neck and placed it right next to the window that directly faces the street and pointed it out to light up the way outside. She eventually got another lamp and did the exact same thing out of the other window of her house. She keeps both lamps on all night because she knows that her neighbors get back home at different times of the night and early hours of the morning. Through this action, she is effectively providing a service to her neighbors that should be fulfilled by the municipality. Claudia's acts are a material reconfiguration of the existing infrastructures, and that reconfiguration is driven by the logic of solidarity. Claudia is not only providing a communal service, but through and by this service, she is effectively effectively building the communal, as the communal is an ontological condition that is generated from the product of a social group with its surrounding worlds (Escobar, 2018).

The kind of designs that take place in Calle Los Mangos can be seen as improvisational acts intended for survival, but Claudia's act of lighting up the street shows how these designs go beyond the improvisational, she is deliberate

in leaving the light on during the entire night to respond to a collective need, it is a form of design for autonomy or self-reliance in view of state omission. Arturo Escobar's (2018) definition of design for autonomía is foundational for understanding these kinds of acts as other designs or designs that respond to other logics:

"Autonomía is not achieved by "capturing the State" but by taking back from the State key areas of social life it has colonized. Its purpose is to create spheres of action that are autonomous from the State and new institutional arrangements to this end." (p.174)

When informal dwellers decide to change their environments and improve their material conditions, these acts are not motivated by economic profit, they do not invest in their homes because they expect in the long run a return of investment, these acts are motivated by solidarity and communality. Migrants change, expand, and modify their dwellings in response to how their family ties change more than as a reflection of an improvement of their economic possibilities. Ana María built a whole extension of her house using only scrap materials when she brought her mother from Nicaragua, she designed and habilitated the space to accommodate for her mother's disability, her neighbors and extended family all provided help in building it in exchange for meals.

All of these "makeshift" infrastructures can be seen as the materialization of affective practices. They are forms of design that stem from other logics, its intent is to build the communal and generate social life against the state's design to disallow it.

INFRASTRUCTURES OF CARE

Throughout history, female migration has been used as an economic strategy for poor households (Chang 2016, Rollings 1985). This is especially true for women that are heads of households and single mothers. The decision to migrate does not fall exclusively on the women that migrate, oftentimes it is the product of an agreement between several members of a group. As female migration sometimes implies leaving behind children or dependents women must arrange other forms of care for their dependents. A grandmother, an aunt, an older sibling, a cousin, a neighbor steps in a primary care provider role and the establishment of a new form of family emerges: a transnational family, in the case of these Nicaraguan women, *la familia binacional* [the binational family]. The binational family is made up of affective practices that seek to contest ruptures imposed from the nation-state, these can be either physical and territorial or can be produced by differentiated possibilities of action among members of the same family based on their country of birth or migratory status.

Women that migrate alone or leave part of their families back in Nicaragua, almost always think about their family separation as a temporary circumstance that they will be able to rectify through material means: gaining a job, securing housing, or by making enough money to return back to Nicaragua and fulfill the economic need that drove them to migrate in the first place. The idea of breaking apart their family is thought to be temporal and they find strategies to rearticulate their family's composition in a manner that compensates for their absence. These strategies usually imply the delegation of care to another person back in Nicaragua.

Once they are in Costa Rica, migrant women realize how state practices of migration control are effective in discouraging family reunification. While women live in Costa Rica under conditions of undocumentation, they are excluded from the *Red de Cuido Nacional* (The National Care Network, the state-managed childcare network services for lower-income families) and other forms of state-subsidized child care services. This exclusion makes it extremely difficult for them to bring their children and keep their employment. In addition to the forms of state exclusion from childcare services, working while undocumented excludes them from a formal contractual labor relationship, which usually implies lower wages, having a lower wage usually implies restricted access to private childcare services. All of these processes build up to structural forms of exclusion that originates from their undocumentedness.

But as we've seen before, exclusion from formality almost always leads to a proliferation of informal structures and practices set to fulfill the vacuum left by the state. In Río Azul, women that stay at home during the daytime to take care of their own children will often take care of their neighbor's children or children of their relatives. Such is the case of Sara, a 27 year old undocumented Nicaraguan, who is a stay at home mom, and takes care of three of her neighbors' children in addition to her son and daughter. Informal economies based on childcare services find fertile grounds in places like Río Azul where there is a large population of undocumented women with children. For the undocumented women that provide these services, these opportunities are possibilities for generating income while undocumented. Not all of them work in exchange for money, other goods and commodities are often used in exchange for childcare services, a form of solidarity economy. One of the mothers that leaves her son with Sara pays her with clean, drinking water. Every afternoon, she receives two large Coca-Cola bottles full of clean drinking water that is filled up in this woman's employer's house.

Oftentimes family reunification is conditional to the possibilities of accessing these informal care infrastructures. Access is usually gained and determined by the time these women have spent in their communities. Time settled in a community allows migrants to build the relationships needed to sustain these

exchange platforms, mostly because these exchanges are supported by trust relationships due to the lack of formal contractual relationships. Strategically, migrants are able to reduce this time by relocating to sites where they already have ties connecting them to these existing relationships, so they end up settling into communities where they already know someone that can act as a gatekeeper, which is an extremely common practice among migrant single mothers.

For migrant women, family reunification is not only deterred by the lack of possibilities of accessing formal childcare infrastructure, but it is also precluded by the conditions in which these undocumented women are inserted into the workforce.

"Es más fácil conseguir trabajo sin los hijos acá, hay familias con chiquitos pequeños que quieren que las muchachas duerman y vivan en la casa. (...) Les gusta cuando tenés hijos, así saben que podés cuidar a los güilas y que uno necesita el trabajo y no los va a dejar tirados. Pero sí creo que les gusta más cuando los hijos están allá en Nicaragua porque así uno puede trabajar los fines de semana y no hay que irse a la casa en las noches."

["It's easier to get a job if you don't have your children here with you, because you can find families with younger children that want muchachas to live in their house. (...) They like it when you have children, because that way they know you can take care of güilas (small kids) and that you need the job and you're not going to bail on them. But I think they like it more when your children are back in Nicaragua, because then you can spend the weekends working and you don't have to go home at night."]

-María José, a 31 year old undocumented Nicaraguan

Women such as María José, who work in domestic services often are employed on the basis of their perceived productivity by future employers. By hiring undocumented women, employers gain the possibility of refusing to ascribe to basic labor rights, and in the case of domestic workers, their undocumentedness is used to overlook the state-mandated 8-hour workday. When migrant women first move to Costa Rica, the possibility of employment as a live-in domestic worker is appealing mostly because it saves them the cost of rent, but in exchange, these women need to be available for child caring and housework at all times. These forms of employment, invisibilize and obscure entire shifts of care work that extend throughout the day and night, rendering most of the work unpaid and blurring the line between work and life. These forms of employment also suspend and deter family reunification.

"Es como que te cambia la frontera, en los dos lados tenés que cuidar a las personas, pero solo en uno te llaman mamá"

["It's like the border changes you, on both sides you take care of people, but only on one side you are called a mother"]

-María José, a 31 year old undocumented Nicaraguan

For migrant women, the border, therefore, acquires an emotional dimension derived from different practices of care. On both sides, care is expected, but on the Costa Rican side, it is commodified and provides the material possibilities to care for their families. Every month, on a Sunday morning Karla, a 24-year-old undocumented migrant, rides the bus downtown to San José with her 3-year-old son to send most of her paycheck back to Nicaragua where her mother takes care of her 8-year-old son. Migrants sustain multiple social links with their old and new communities and are able to link both together through practices of care and economic exchange.

Migrant women develop strategies for affective and emotional practices through transnational spaces, made up of multiple links and networks sustained by migrants and their practices (Glick Schiller et al. 1992; Gielis 2009; Snel et al. 2006; Faist 2010; Guarnizo et al 2003). Transnational spaces are the product of major advances in communication and transportation technologies (Gielis 2009), and increasingly, they have become virtual spaces. Women use Whatsapp and Facebook on a near-daily basis to sustain ties and communication across borders. Remittances are probably the most important transnational practice for economic migrants, because it is the means by which they can materially delegate care.

Remittances also allow the possibility to build wealth for migrants that are excluded from financial and banking institutions. Karla, as an undocumented worker, is unable to open a bank account in Costa Rica. Every month when she receives her payment in cash, she sends most of it to her mom by using a remittance service. Part of this money is used to cover living expenses and part of it goes into a savings account in a bank in Nicaragua which her mom manages on Karla's behalf. Karla's aim is to save enough money to eventually move back to Nicaragua and buy a small plot of land to build a house.

5.5 CLAIMING OTHER FORMS OF CITIZENSHIP

The counter-practices that I decided to disclose in this chapter are intended to evidence how women are effectively worlding, through these practices and their materializations they are building worlds shaped by other logics, logics that initially emerge from state exclusion such as contestation and (in)visibility, but ultimately these are logics based on communality and solidarity. These forms of contestation can also be seen as using design as material politics. In this

sense, design is used to reconfigure the material possibilities afforded by their undocumented condition as well as redistributing these material possibilities as a form of emancipation.

All these actions, practices, systems of exchange and economies, relationships, infrastructures, are all tactical and strategic. Some of these might be thought explicitly as forms of contestation and resistance, while some of the more discrete actions might not be perceived as such by the migrants that perform these, but all these instances are building the communal, and in turn the communal affords possibilities of action from the gaps left by the state. What emerges in the middle of Río Azul, are new forms of life, solidarity and emancipation. These new forms are the product of border-struggles, which shape new relational ways of being.

Improvised childcare centers, house extensions, reconfiguration of public spaces, payments based on other forms of exchange, networks of solidarity that provide drinking water, affective ties that don't ascribe to the formal family model, these relationships and practices are shaping a communal structure that the product of designed interventions intended to contest state power by sustaining and reproducing life in a place where the state's designs actively disallow it.

It is possible to see in Calle Los Mangos forms of democratic participation, in a place neglected by formal democracy. The women that participate in Vínculos, self-organize and practice forms of democratic politics outside of the state's mediation. These forms of organization provide migrants a sense (and a claim) of belonging and the possibility of enacting forms of citizenship and participation that are negated by the state. These forms of citizenship do not respond to the logic of belonging to the nation-state, but belonging to the communal.



Vínculos at the Labor Day March

CHAPTER 6. CONCLUSIONS AND CONTRIBUTIONS TO KNOWLEDGE

CONCLUSIONS

As I am writing these conclusions, countries are facing the coronavirus spread across the globe. On March 18th of 2020, at exactly 23:59:59 Costa Rica shut all of its borders for the first time in history, the only exception applied to Costa Rican citizens or permanent residents. Since that day, migration officers have been sent to the country's northern border in an attempt to materialize and reenforce the land border between Nicaragua and Costa Rica. This is intended to stop Nicaraguans from entering the country, even those with consular visas or other forms of migratory authorization. Less than a week after the borders were closed off, the President announced that any permanent resident that left the Costa Rican territory would immediately lose their residency.

This new fear of coronavirus has effectively instated a state of exception and has taken over the operation of migration management systems and border control. This state of exception is the product of an emergent state logic of control that has surfaced in response to the virus threat. Overnight, this emerging logic was able to override all existing migratory policies and immediately generated novel forms of producing "illegality", proving how the production of "illegality" can be considered a designed process determined by a series of interventions from state actors.

The conceptualization of design as the selection, materialization, and configuration of logics presented in this dissertation allows us to understand these sudden and massive changes in the Costa Rican national migratory policy. The series of political decisions that are drastically changing policy from one day to the other, are designed interventions that respond to an emerging and changing logic that is shaped by the coronavirus as a historical force. What we are seeing right now is the unfolding of an emerging control logic shaped by a pandemic threat and these changes in policy are the initial materializations of this new logic that will continue to unfold new materializations of migration and border control.

In Costa Rica, years of political decisions, informed by the colonial logic of difference and hierarchy, have materialized in processes and systems that render Nicaraguans less-than-human. These political decisions have materialized in the design of state institutions, policy, legislation, and the sociotechnical systems that mediate access to the institutions that allow the reproduction

of life. From the undocumented experience of the Nicaraguan women that participated in this research, we can argue that all of these are complicit in generating and sustaining the condition of undocumentedness.

The term undocumentedness is in itself revealing, as it immediately references the lack of a material thing: documents (*designed* documents). It is not a designation that refers to the qualities of a person, it describes the position of a person in relation to a system that ranks and categorizes populations based on their capability of providing forms of verification and material proofs. It is an instrumentalization of "illegality" while it also serves a process of dehumanization needed to justify and sustain migrants as exploitable labor. A subject that is included in the state (documented) is considered a subject of rights, while exclusion from the state (undocumentedness) dehumanizes the subject reducing the subject to its body, a body that can be used for underpaid labor and a body that can be shaped by disciplinary mechanisms until it is rendered worthy of becoming a subject of rights.

Understanding design as a form of material politics that shapes and builds worlds where human action is conditional to our position within the systems that have been designed by logics of control and migration management is a way of interrogating design's complicity in articulating power relationships that subjects migrants to conditions of precarity and exploitability. In this dissertation I considered how documents of identification, forms, and proofs of verification are able to categorize humans and through these categories, the state is able to grant or remove rights. This allows us to understand how the sociopolitical condition of undocumentedness only exists because of design's persuasive capabilities to create categories that are understood as "natural" within the "artificialness" of the nation-state. Simply put, Nicaraguan women are undocumented because design has allowed the possibilities to create the condition of undocumentedness.

The design-driven analysis presented in this dissertation reveals how power is enacted and reproduced beyond the discourses that abstract power. And through this analysis it is possible to make the claim that the undocumented condition is in fact a designed condition. This condition relies on a constellation of bordering designs, which range from verification documents and material proofs (such as a DIMEX card, a passport, a birth certificate, a proof of residency, a work permit), to infrastructures of public services (such as cell phone service coverage, and drinking water and indoor plumbing), systems of urban design (the lack of accessibility of Calle Los Mangos) and gendered practices of labor (invisibilized domestic and care work in private homes).

Throughout this dissertation, using the experience of undocumented Nicaraguan women was critical to understanding how the intersection of systems of information and regimes of practices from the state and other actors generates an undocumented migrant. These multiple intersections of systems—some of them incompatible since inception (like the case of Yessenía discussed in Section 4.3)— are mechanisms of mass production of il/legal bodies and regimes of in/formality.

These regimes of in/formality become evident in a place like Calle Los Mangos in Río Azul (see Section 4.5 and Chapter 5). Through the lived experience of these women, it is possible to articulate everyday practices as responses to the specific material conditions of this place, which are produced by state and non-state actors: the topology of Cerro La Carpintera, the Río Azul landfill and its lasting environmental sequels, complex and intricate relationships between local government and state institutions, the privatization of telecommunication services, the political expansion of the Christian evangelical church, and underground, illegal drug markets; all of these materialize the conditions of border-dwelling (Section 4.5). These conditions are what drive undocumented migrants carry out their everyday lives as an orchestrated set of practices that enable them to reappropriate and work around the sociotechnical systems that make up the "the existential conditions of migrants who are always dwelling in the borders" (Mignolo, 2000, p.xv).

The counter-practices that I have introduced throughout this dissertation and in particular in Chapter 5 are intended to evidence how these women are effectively worlding, through these practices and their materializations they are building worlds shaped by other logics, logics that initially emerge from state exclusion such as contestation and (in)visibility, but ultimately these are logics based on communality and solidarity. These forms of contestation can also be seen as using design as material politics, design in this case is inscripted with a tactical reversibility of power. In this sense design is used to reconfigure the material possibilities afforded by their undocumented condition as well as redistributing these material possibilities as a form of emancipation.

The infrastructures materialized by the women that live in Calle Los Mangos—improvised childcare centers, makeshift houses, and their subsequent extensions, the reconfiguration of public spaces, payments and systems of exchange that are not based exclusively on money— are shaped by tactical and strategic practices that form and structure the communal, a communal that is not mediated by state contracts, but instead intially generated and shaped by state exclusion. We can see these practices as forms of design for autonomy: a series of designed interventions intended to contest state power by sustaining life in a place where the state's designs actively disallow the reproduction of life.

The questions that started off this dissertation and that drove this inquiry

within design were intended to be an effort to reverse the gaze and hold design accountable in the ways it generates and sustains conditions imposed and naturalized by the artificial, such as undocumentedness. Binaries such as regularity/irregularity, legality/illegality, documented/undocumented, inside/outside can be understood as sustained artificially by human actions that rely on material configurations that validate one condition over the other. However, in the same sense design is able to materialize the logics that generate these conditions—bordering designs—, design is also able to materialize those logics that seek to contest and resist these conditions—contestation designs. Therefore, the relationship between bordering designs and contestation designs has to be understood through their ontological relationship.

CONTRIBUTIONS TO KNOWLEDGE & IMPLICATIONS FOR THIS RESEARCH

This is a study that underscores the relation between power, design and the material to articulate the issue of feminized migration between Nicaragua and Costa Rica, which can be conceptualized in the larger field of South-to-South migrations. This research highlights how coloniality sustains logics that shape other human conditions, and considers design as complicit in sustaining and materializing the colonial logic used to dehumanize subjects and justify the denial and suspension of rights.

This dissertation considers how design is profoundly interwoven with the social. It considers the life of documents and forms of verification and their agency. It considers how design has been able to produce a documented human and an undocumented one: categories that seem natural within modernity, and categories that generate different subjectivities, possibilities of action and ways of being in the world.

This dissertation explores the intersection between the material, everyday life and the issue of bordering. I argue that this intersection is a critical site for analysis for design studies in order to uncover design's complicity in generating and sustaining larger systems of power. The undocumented condition Nicaraguan women experience is sustained by a constellation of designed things, environments, interactions and situations. These become visible by situating this research at the site of everyday life, evidencing how design successfully scatters and disperses the architecture of power.

The conceptualization of design introduced and used to analyze this dissertation can be used to ground further analysis of power through a design perspective. This allows the possibility of situating design within larger systems to consider

design's role in the materialization of power relationships. This framing of design can be used to interrogate design's role in generating and sustaining processes of control and exclusion. By shifting from the figure of the designer to the conditioning force of logics as the main driver of design, it is possible to hold design accountable in generating and scattering systems of power. In doing this, we can interrogate the actors behind these designs, who might not be responsible for explicitly producing entire systems of power, but they are responsible for reproducing the logic that sustains power.

This dissertation is a contribution to knowledge within the field of design because it is an example of asking other kinds of questions within the field of design. It is an example of using design to understand a problem that is sustained and generated by design, it is an example of what it looks like when design reverses its gaze. Instead of asking the question How do migrants cope with the migrant condition?, I asked How has design contributed to creating and perpetuating the undocumented migrant condition? Abandoning design's problem-solving mindset, I was able to approach the issue in a manner that revealed design's own making of the problem. This approach is intended to recognize how power is designed.

In asking this question and using ethnographic methods, this dissertation highlights other knowledges, and other sites of production of knowledge that are usually overlooked by most forms of research and production knowledge. Using the experience of undocumented Nicaraguan women, is a form of recognizing their experiences as a site of knowledge production and sites of power. Nicaraguan women are able to subvert the power that produces and subjects them to "illegal" bodies. These forms of subverting are materialized in designs that are effective in reversing the power dynamics between Nicaraguan women and the Costa Rican state. If the state will not provide women in Calle Los Mangos electric power, they will find ways to access power lines and redistribute it as a form of emancipation. I argue that these designs need to be recognized as part of the growing acknowledgment of designs emerging from the Global South that are expanding and redefining the dominant ideas that determine what falls in and out of the domain of design.

Design research, in particular socially oriented design, is in need of other forms of engagement, engagement that is truthful to the complexities of the human and the social without tending towards simplification and avoiding perpetuating the issues it is problematizing. In this research I present a critically reflective social design research stance that is the result of careful consideration and review of methodologies that recognize the problematic nature of approaching research with an objective and removed position. This stance can be used to rethink the traditional approaches of design research and can serve as guidelines for conducting socially-oriented research that privileges a situated and contextual

approach that is mindful of issues of ambiguity, contradiction, interpretation and cultural interlocution.

Finally, the research presented in this dissertation, both in form and content, has implications for those working in policy and legislation. This dissertation presents a method that considers the ways in which policy and legislation materialize, and how these materializations not only generate differentiated possibilities of action. Additionally, it considers how policy and legislation is used to generate systemic incompatibilities that suspend humans into inhabiting conditions of perpetual precarity. By doing this it is possible to denaturalize certain human conditions and consider the way policy and legislation is designed to make these conditions intrinsic to the human condition.

While some systems of policy and legislation are essentially perverse and are designed explicitly to subject individuals to forms of exploitation. What the findings in this dissertation show is that most conditions of undocumentedness are the result of clashes between multiple incongruent systems of information management and culturally specific regimes of practices. Failing to rectify these clashes make policy makers complicit in generating and sustaining systems that produce expendable and exploitable labor, whether they recognize it or not.

FUTURE WORK

In this dissertation, I argue that the institutional processes by which the Costa Rica state reduces migrants to undocumented bodies is determined by the structure, composition, and possibilities of the Costa Rican state, and how these institutional processes also respond to changes in the historical conditioning forces that shape logics. Coronavirus, as a historical conditioning force, will generate a new logic of state power and migration control, how this materializes seems to be changing on a daily basis, informed by new knowledge about the virus and its relation to humans. But it seems clear that this new logic will now generate new forms and materialities of verification that will take into consideration that a subject that is stripped of rights and reduced to an exploitable and disciplinable body, a body without rights can still be a carrier and vector of transmission. This will inevitably change the relationship between the Costa Rican state and migrants living under conditions of undocumentedness.

Given the magnitude of the events that we are currently living through and the lasting implications these will have in shaping the way humans move, attention to kinds of bordering designs that this emerging logic of state power will generate is a critical future direction to continue the kind of research presented in this

dissertation. This emerging state logic is currently developing and unfolding in response to a new kind of biological threat. However, this logic will not be entirely novel, it will carry the already existing colonial and biopower logics. How this emerging logic of control will articulate with these will become evident in their materializations within new migratory management systems and border controls. This interrogation will be necessary in Costa Rica, as well as in other countries around the globe, because although the coronavirus is a global event, countries will develop specific political decisions that will materialize differently depending on the possibilities, infrastructures, and composition of each state, and new forms of producing "illegal" bodies and restricting mobility for certain bodies will be generated.

REFERENCES

- Abraham, I. & Schendel, W. van. (2005). "Introduction. The making of illicitness." In: Schendel, W. van, & Abraham, I. (Eds). (2005). *Illicit flows and criminal things. States, borders, and the other side of globalization*. Indiana University Press.
- Akama, Y. & Hagen, P. & Whaanga-Schollum, D. (2019). Problematizing Replicable Design to Practice Respectful, Reciprocal, and Relational Co-designing with Indigenous People. *Design and Culture*. 1-26. 10.1080/17547075.2019.1571306.
- Akama, Y. & Yee, J. (2019) Special Issue: Embracing Plurality in Designing Social Innovation Practices. *Design and Culture*, 11:1, 1-11, DOI: 10.1080/17547075.2019.1571303
- Akama, Y. & Yee, J. (2016), 'Seeking stronger plurality: Intimacy and integrity in designing for social innovation', paper presented to Cumulus Hong Kong: Open Design for E-very-thing, Hong Kong, Nov 21-24.
- Alvarenga, P (2007). "Inmigración y emigración en Costa Rica." In Sandoval, Carlos, ed. El mito roto: Inmigración y emigración en Costa Rica. Editorial de la Universidad de Costa Rica.
- Agamben G. (1998). Homo Sacer: Sovereign Power and Bare Life. Stanford Univ.

 Press
- Agamben, G. (2005). State of Exception. The University of Chicago Press.
- Agamben, G. (2013a) "Introduction to Homo Sacer: Sovereign Power and Bare Life". In: Campbell, T. & Sitze, A. *Biopolitics: A Reader.* Duke University Press.
- Agamben, G. (2013b) "The politicization of Life". In: Campbell, T. & Sitze, A. *Biopolitics: A Reader.* Duke University Press.
- Agamben, G. (2013c) "Biopolitics and the Rights of Man". In: Campbell, T. & Sitze, A. Biopolitics: A Reader. Duke University Press.
- Ahmed, S. (2006). *Queer Phenomenology: Orientations, Objects, Others.* Duke University Press.
- Ahmed, S. (2010). "Orientations matter". In *New Materialisms: Ontology, Agency and Politics*, edited by Diana Coole and Samantha Frost, 234-57.

- Duke University Press.
- Anderson, B. (2016). *Imagined communities*. Verso Books.
- Ansari, A., (2019). Global Methods, Local Designs, *The Social Design Reader*, Bloomsbury Press, New York (Awaiting Publication)
- Anzaldúa, G. (2012). Borderlands/La frontera. The New Mestiza. Aunt Lute Books.
- Appadurai, A. (1988). The social life of things: Commodities in cultural perspective. Cambridge University Press.
- Appadurai, A. (1996). *Modernity at large. Cultural dimensions of globalization.*University of Minnesota Press.
- Appadurai, A. (2006). Fear or Small Numbers: An essay on the geography of anger. Duke University Press.
- Arendt, H. (1973). The Origins of Totalitarianism. Houghton Mifflin Harcourt.
- Arendt, H. (1998)[1958]. The Human Condition. The University of Chicago Press.
- Avalos, Angela. (2017). "Asegurar empleadas domésticas que trabajan por horas tendrá costos más bajos a partir de este mes", La Nación, 18 de julio 2017. https://www.nacion.com/el-pais/salud/asegurar-empleadas-domesticas-que-trabajan-por-horas-tendra-menos-costo-a-partir-de-este-mes/OCTGO7JEKFEP5BC66LEK2TJBDA/story/
- Balibar, E. (1998). "The Borders of Europe". In Cheah, P., & Robbins, B. (Eds.). *Cosmopolitics: Thinking and Feeling Beyond the Nation*. University of Minnesota Press.
- Balibar, E. (2003). We the people of Europe? Reflections on Translational Citizenship. Princeton University Press.
- Balibar, E. (2017). Citizen Subject: Foundations for Philosophical Anthropology. Fordham University Press.
- Bennett, K. (2007). Epistemicide! The tale of a predatory discourse. *The translator*. Volume 13, Number 2 (2007). 151-169.
- Bennett, T. & Joyce, P. (eds) (2010). *Material Powers. Cultural Studies, History and the Material Turn.* Routledge.

- Berry, J.W. (1997). "Immigration, Acculturation, and Adaptation". Applied Psychology: An International Review. 4(1). 5-68.
- Bhabha, H.K. (2004). The Location of Culture. Routledge Classics.
- Bijker, W. E., & Law, J. (1992). Shaping technology/Building society. Studies in Sociotechnical Change. *The Journal of Technology Transfer* (Vol. 19). The MIT Press.
- Bijker, W.E. (1995). Of Bicycles, Bakelites and Bulbs. Towards a theory of sociotechnical change. MIT Press.
- Brenes, G. (1999) Estimación del volumen y caractersíticas sociodemográficas de los inmigrantes Nicaragüenses en Costa Rica. Tesis. Universidad de Costa Rica, San Pedro de Montes de Oca, San José.
- Brown, L. and Strega, S. (Eds.), Research as Resistance: Critical, Indigenous, & Anti-Oppressive Approaches. Canadian Scholars' Press.
- Bonsiepe, G. (2006). "Design and Democracy". Design Issues, 22 (2): 27-34.
- Bonsiepe, G. 1977, 'Precariousness and Ambiguity: Industrial Design in Dependent Countries', in J. Bicknell & L. McQuiston (eds), *Design for Need*, ICSID/Pergamon Press, pp. 13 9.
- Bonnie, A. (2010). Trabajadoras domésticas nicaragüenses en Costa Rica: un tortuoso camino hacia el reconocimiento. *Encuentro*, 42(87): 75–88.
- Borland, R. (2011). *Radical Plumbers and PlayPumps. Objects in Development.* Trinity College, Doctoral Dissertation.
- Botero, A. (2013). *Expanding design space(s): design in communal endeavours.*Aalto University publication series Doctoral Dissertations.
- Bourdieu, P. (1990). The Logic of Practice. Stanford, CA: Stanford University Press.
- Brown, T. (2009). *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*. Harper Business.
- Brown, W. (2010). Walled States, Waning Sovereignty. MIT Press.
- Brown, W. (2016). El pueblo sin atributos: La secreta revolución del neoliberalismo. Malpaso

- Butler, J. (1990). Gender Trouble: Feminism and the Subversion of Identity. Routledge.
- Buchanan, R. (1992). "Wicked Problems in Design Thinking". *Design Issues* 8 (2): 5-21.
- Butoylia, D. (2018). *Critical Jugaad*. Doctoral Dissertation. School of Design, Carnegie Mellon University.
- Cachón Rodríguez, L. (2008). La integración de y con los inmigrantes en España: debates teóricos, políticas y diversidad territorial. *Política y Sociedad*, 45(1), 205 235.
- Campbell, T. & Sitze, A., eds. (2013). Biopolitics: A Reader. Duke University Press.
- Cantú, N.E., & Hurtado, A. (2012) "Breaking Borders / Contructing Bridges: Twenty-Five Years of Borderlands/La Frontera. In: Anzaldúa, G. (2012). Borderlands/La frontera. The New Mestiza. Aunt Lute Books.
- Caro, R. (1974). The Power Broker: Robert Moses and the Fall of New York. Knopf.
- Castles, S., Korac, M., Vasta, E., & Vertovec, S. (2005). *Integration: Mapping the Field*. Oxford University, Centre for Migration and Policy, Research and Refugee Studies Centre.
- Castro-Gómez, S. (2000). "Ciencias sociales, violencia epistémica y el problema de la "invención del otro."". In: Lander, E. *La colonialidad del saber:* eurocentrismo y ciencias sociales. CLACSO.
- Certeau, M. de (1981). "Californie, un théâtre de passants," *Autrement*, 31 (April). 10-18.
- Certeau, M. de (1984). The practice of everyday life. California University Press.
- Chambers, A. 2009, 'Africa's not-so-magic roundabout', Guardian, 24 November 2009.
- Chomsky, A. (2014). *Undocumented: How Immigration Became Illegal*. Beacon Press.
- Clark, H., & Brody, D., eds. (2009). Design studies: A Reader. Berg.
- Clifford, J. (1994). Diasporas. Cultural Anthropology. 9(3). 302-338.

- Clifford, J. (1997). Routes. Travel and translation in the late Twentieth Century. Harvard University Press.
- Coole, D. & Frost, S. (2010). *New Materialisms. Ontology, Agency and Politics.*Duke University Press
- Coutin, SB. (2000). Legalizing Moves: Salvadoran Immigrants' Struggle for U.S. Residency. University Michigan Press.
- Crenshaw, K. (1991). Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color. *Stanford Law Review*. Vol. 43, No. 6 (Jul., 1991), pp. 1241-1299.
- Christian, M. (2013). '... Latin America without the downside': racial exceptionalism and global tourism in Costa Rica, *Ethnic and Racial Studies*, 36:10, 1599-1618, DOI: 10.1080/01419870.2013.788199
- Cross N. (1993) A History of Design Methodology. In: de Vries M.J., Cross N., Grant D.P. (eds) *Design Methodology and Relationships with Science*. NATO ASI Series (Series D: Behavioural and Social Sciences), vol 71. Springer, Dordrecht
- Dahinden, J. (2010). "The dynamics of migrants' transnational formations: Between mobility and locality" In: Bauböck, R. & Faist, T. (Eds) (2010). Diaspora and Transnationalism: Concepts, theories and methods. Amsterdam University Press.
- Dabashi, H. (2015). Can Non-Europeans Think. Zed Books.
- Davis, M. (2007). Planet of Slums. Verso
- De Genova, N. (2002). ""Illegality" and Deportability in Everyday Life. *Annual Reviews of Anthropology*. 31. pp. 419-47.
- De Genova, N. (2010). The Deportation Regime: Sovereignty, Space, and the Freedom of Movement. Duke University Press.
- De Genova, N. (2013). "Spectacles of Migrant 'Illegality': the Scene of Exclusion, the Obscene of Inclusion". *Ethnic and Racial Studies* 36 (7): 1180-1198.
- Deleuze, G. (1992). "Postscript on the Societies of Control". October 59 (4): 3-7.
- Delgado, R. & Stefancic, J. (2017). *Critical Race Theory. An Introduction*. New York University Press.

DiSalvo, C. (2012). Adversarial Design. The MIT Press.

Dilnot, Clive. (2005). "Ethics? Design?" In: The Archeworks Papers 1 (2), edited by D.S. Friedman, Victor Margolin and Stanley Tigerman. Chicago: Archeworks.

Dilnot, C. (2009). "Ethics in Design: 10 Questions" In: Clark, H., & Brody, D., eds. (2009). *Design studies: A Reader*. Berg.

Dilnot, Clive. (2015). "History, Design, Futures: Contending with What we Have Made". In *Design and the Question of History*. edited by Clive Dilnot, Tony Fry and Susan Stewart, 131-271. Bloomsbury Academic.

Domínguez Rubio, F. & Fogué, U. (2015). "Unfolding the political capacities of design". In: Yaneva, A. & Zaera Polo, A. (Eds) What is comopolitical design?. Ashgate.

Dunne, T. & Raby, F. (2013). Speulative Everything. MIT Press.

Dussel, E. (1995). *The Invention of the Americas: Eclipse of "the Other" and the Myth of Modernity*. Translated by Michael D. Barber. Continuum.

Düvell, F., & Jordan, B. (2002). Immigration, asylum and welfare: the European context. *Critical Social Policy*, 22(3), 498–517. https://doi.org/10.1177/026101830202200307

Easterling, K. (2005). Enduring Innocence: Global Architecture and its Political Masquerades. MIT Press.

Easterling, K. (2016). Extrastatecraft. The Power of Infrastructure Space. Verso.

Escobar, A. (1998). *Territories of difference*. Duke University Press.

Escobar, A. (2011). Encountering Development. Princeton University Press.

Escobar, A. (2018). *Designs for the Pluriverse*. Duke University Press.

Faist, T. (2010). "Diaspora and transnationalism: What kind of dance partners?" In: Bauböck, R. & Faist, T. (Eds) (2010). Diaspora and Transnationalism: Concepts, theories and methods. Amsterdam University Press.

Fanon, F. (1986). Black Skin White Masks. Pluto Books.

Foucault, M. (1982). "The Subject and Power" in: *Critical Inquiry,* Vol. 8, No. 4 (Summer, 1982), pp. 777-795

- Foucault, M. (2013a). "Right of Death and Power over Life" In: Campbell, T. & Sitze, A., eds. *Biopolitics: A Reader*. Duke University Press.
- Foucault, M. (2013b) "Society Must Be Defended," Lecture at the Collége de France, March 17, 1976. In: Campbell, T. & Sitze, A., eds. *Biopolitics: A Reader.* Duke University Press.
- Frayling, C. (1993). Research in Art and Design. Royal College of Art..
- Fry, T. (2009). Design Futuring: Sustainability, Ethics and New Practice. Berg.
- Fry, T. (2010). Design as Politics. Berg.
- Fry, T. (2015). "Whither Design/Whether History". In *Design and the Question of History*, edited by Tony Fry, Clive Dilnot, and Susan Stewart. Bloomsbury.
- Fry, T. (2017) Design for/by "The Global South", *Design Philosophy Papers*, 15:1, 3-37, DOI: 10.1080/14487136.2017.1303242
- Fry, T., Dilnot, C., & Stewart, S. (eds.) (2015). Design and the Question of History. Bloomsbury
- Funkhouser, E., Pérez, J.P., Sojo, C. (1999) Social Exclusion of Nicaraguans in the Urban Metropolitan Area of San José. Inter-American Development Bank.
- García Canclini, N. (1995). *Hybrid Cultures, Oblique Powers*. Duke University Press.
- Geels, F. (2005). Technological transitions and system innovations: A coevolutionary and socio-technical analysis. Edward Elgar, UK.
- Gielis, R. (2009). A global sense of migrant places: Towards a place perspective in the study of migrant transnationalism. *Global Networks*, 9(2), 271-287. http://doi.org/10.1111/j.1471-0374.2009.00254.x
- Gilroy, P. (1994). 'Black Cultural Politics: An Interview with Paul Gilroy by Timmy Lott', *Found Object*, Vol. 4, pp. 46–81.
- Gilroy, P. (2000). Between Camps. Harmondsworth: Penguin.
- Glick Schiller, N., & Fouron, G. (1999). Terrains of Blood and Nation: Haitian Transnational Social Fields. *Ethnic and Racial Studies* 22(2): 340–366.
- Glick Schiller, N., Badch, L., & Blanc-Szanton, C. (1992). Transnational: A new

- analytic framework fro understanding migration. *Annals of the New York Academy of Sciences*, 645(1), 1-24. http://doi.org/10.1111/j.1749-6632.1992. tb33484.x
- Golash-Boza, T. & Bonilla-Silva, E. (2013) Rethinking race, racism, identity and ideology in Latin America, *Ethnic and Racial Studies*, 36:10, 1485-1489, DOI: 10.1080/01419870.2013.808357
- Goldade, K.R. (2008). South-to-south migration, reproduction, health, and citizenship: The paradoxes of proximity for undocumented Nicaraguan labor migrant women in Costa Rica. Doctoral Dissertation. University of Arizona.
- Gómez, P., Barbosa, F., López-Caniego, M., & Martínez, M. (2005). I. La integración: conceptualización y análisis. En O. d. Madrid (Ed.), *Puntos de Vista. Cuadernos del Observatorio de las Migraciones y la Convivencia Intercultural de la Ciudad de Madrid* (p. 7-30). Madrid, España: Universidad Autónoma de Madrid.
- González Stephan, B. (1996). "Economías fundacionales. Diseño del cuerpo ciudadano." En: González Stephan, B. (Compiladora). Cultura y tercer mundo. 2. Nuevas identidades y ciudadanías, Editorial Nueva Sociedad, pp. 17-47.
- Graham, S. (2011). Cities under siege. Verso.
- Grosfoguel, R. (2009). A Decolonial Approach to Political-Economy: Transmodernity, Border Thinking and Global Coloniality. *Kult 6* Special Issue, 10–38. http://doi.org/10.2307/40241659
- Grossberg, L. (2010). Cultural Studies in the Future Tense. Duke University Press.
- Guarnizo, L.E., Portes, A., & Haller, W. (2003). Assimilation and Transnationalism: Determinants of transnational political action among contemporary migrants. *American Journal of Sociology*, 108(6), 1211-1248.
- Gudmundson, L. (1986). *Costa Rica Before Coffee*. Louisiana State University Press.
- Borrero Gutiérrez, A. (2015). *Resurgences: south, as designs and other designs.* 113-129.
- Habermas, J.(1971). *Knowledge and Human Interests*. Boston: Beacon Press.
- Habermas, J. (1973). Theory and Practice. Boston: Beacon Press.

- Hall, S. (1980). "Race, Articulation and Societies Structured in Dominance." In *Sociological Theories: Race and Colonialism*, 305–45. Paris: UNESCO.
- Hall, S. 1986. "On postmodernism and articulation: an interview with Stuart Hall". In: L.Grossberg (ed.), *Journal of Communication Inquiry* 10(2), 45–60.
- Hall, S. (1996). Who needs identity? In: Hall, S., & Du Gay, P. (1996) *Questions of cultural identity*. Sage Publications.
- Haraway, D. (1984). "A Cyborg Manifesto: Science, Technology, and Socialist-Feminist in the Late Twentieth Century." In: Hermann, A., & Stewart, A.J. (Eds) (1994). Theorizing feminism: Parallel trends in the humanities and social sciences. Westview Press.
- Haraway, D. (1988). "Situated knowledges: The science question in feminism and the privilege of partial perspective". *Feminist Studies*. Vol 14, No.3, pp. 575-599.
- Haraway, D. (2004). "The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others". In *The Donna Haraway Reader*, 63-124. London and New York: Routledge.
- Harding, J. (2012). Border vigils. Keeping migrants out of the rich world. Verso.
- Hardt, M. & Negri, A. (2013) "Biopolitics as Event". In: Campbell, T. & Sitze, A., eds. (2013). *Biopolitics: A Reader.* Duke University Press.
- hooks, B. (1981). Ain't I a woman. South End Press.
- hooks, B. (1989). "Choosing the margin as a space for radical openness". In: *Framework: The Journal of Cinema and Media*. No. 36, pp15-23.
- Houtum, H. van (2005). The geopolitics of Borders and Boundaries. *Geopolitics*. 10(1). 672-679.
- Houtum, H. van, Naerssen, T. van (2002). Bordering, ordering and othering. *Tijdschrift voor Economische en Sociale Geografie*. 93(2). 125-136.
- Hull, M. (2012). "Documents and Bureaucracy". *Annual Review Anthropology* 41:251–67
- Inda, J. X., & Dowling, J. (2013). Introduction: Governing Migrant Illegality. In J. A. Dowling, & J. X. Inda (Eds.), *Governing Immigration Through Crime: A Reader* (pp. 1-36). Stanford University Press.

- Instituto Nacional de Estadística y Censos (2014). *Costa Rica a la Luz del Censo 2011.* San José, Costa Rica. Instituto Nacional de Estadística y Censos.
- Joerges, B. (1999). Do Politics have Artefacts? *Social Studies of Science*. 29(3). 411-431.
- Jones, R., & Johnson, C. (eds.) (2014). *Placing the Border in Everyday Life*. Ashgate Publishing.
- Joppke. C., & Morawska, E. (2010). "Integrating immigrants in Liberal Nation-States: Policies and Practices." In: Joppke. C., & Morawska, E. (Eds.). (2003). *Toward Assimilation and Citizenship. Immigrants in Liberal Nation-States*. Palgrave Macmillan.
- Julier, G. (2008). The culture of design. SAGE
- Kalantidou, E. & Fry, T. (eds) (2014) Design in the Borderlands. Routledge.
- Keshavarz, M. (2016). *Design Politics: An Inquiry into Passports, Camps and Borders*. Doctoral Dissertation in Interaction Design, Malmö University.
- Kelly T. (2006). Documented lives: fear and the uncertainties of law during the second Palestinian intifada. *J. R. Anthropol. Inst.* 12:89–107
- Kimbell, L. (2011) Rethinking Design Thinking: Part I, *Design and Culture*, 3:3, 285-306, DOI: 10.2752/175470811X13071166525216 To
- Kolossov, V., & Scott, J. (2013). Selected conceptual issues in border studies, *Belgeo* [Online]. (1). 0-19.
- Kymlicka, W. (1995). *Multicultural citinzenship*. A liberal theory of minority rights. Oxford: Claredon Press.
- Larkin, B. (2013). The Politics and Poetics of Infrastructure. *Annual Review of Anthropology*. 42(1). 327-343.
- Latour, B. (1987). Science in Action: How to Follow Scientists and Engineers Through Society. Harvard University Press.
- Latour, B. (1992). "Where are the missing masses". In: Bijker, W.E., & Law, J. (1992). Shaping technology / Building Society. Studies in Sociotechnical Change. The MIT Press.
- Latour, B. (1999). Pandora's Hope. Essays on the reality of science studies. Harvard

- University Press.
- Law, J. (1994). *Organizing Modernity*. Blackwell.
- Langbein J. (2017). Firewood, smoke and respiratory diseases in developing countries-The neglected role of outdoor cooking. *PloS one*, 12(6), e0178631. https://doi.org/10.1371/journal.pone.0178631
- Lentin, A. & Titley, G. (2011). The Crises of Multiculturalism. Racism in a Neoliberal Age. Zed Books.
- Luhmann, N. (1995) Social Systems. Stanford University Press: Stanford.
- Manzini, E. (2015). Design when everybody designs. MIT Press.
- Maturana, H. R., & Varela, F. J. (1987). The tree of knowledge: The biological roots of human understanding. New Science Library/Shambhala Publications.
- Mbembe, A. (2013) "Necropolitics". In: Campbell, T. & Sitze, A., eds. *Biopolitics:* A *Reader*. Duke University Press.
- Mezzandra, S. and Neilson, B. (2013). *Border as Method, or, the Multiplication of Labor.* Duke University Press.
- Mignolo, W. (2000). Local Histories/Global Designs: Coloniality, Subaltern Knowledges, and Border Thinking. Princeton University Press.
- Mignolo, W. (2005). The idea of Latin America. Blackwell.
- Mignolo, W. (2009). "Epistemic Disobedience, Independent Thought and De-Colonial Freedom". In: *Theory, Culture & Society* Vol. 26(7–8): 1–23 DOI: 10.1177/0263276409349275
- Mignolo, W. (2011a). Geopolitics of sensing and knowing: on (de)coloniality, border thinking and epistemic disobedience. *Postcolonial Studies*, 14(3), 273–283. http://doi.org/10.1080/13688790.2011.613105
- Mignolo, W. (2011b). "I Am Where I Think: Remapping the Order of Knowing". In: Lionnet, F., & Shih, S. (Eds.). *The Creolization of Theory*. Duke University Press, pp.159–192.
- Mignolo, W. (2012). Local Histories/Global Designs: Coloniality, Subaltern Knowledges, and Border Thinking. Princeton University Press.

- Mignolo, W. & Tlostanova, M.V. (2006). Theorizing from the Borders: Shifting the Geo and Body-Politics of knowledge. *European Journal of Social Theory*, 9(2): 205-221.
- Miller D. (1987). Material Culture and Mass Consumption. Basil Blackwell
- Miller D, ed. (2005). Materiality. Duke University Press
- Miller, T. (2019). Empire of Borders: The Expansion of the U.S. Border Around the World. Verso.
- Morales Gamboa, Aberaldo. (1999). Situación de la población inmigrante nicaragüense en la Región Huetar Norte: Un enfoque propositivo. *Revista de Historia*, (40), 127-155.
- Mouffé, C. (Ed.) (1992). Dimensions of democracy. London, UK: Verso.
- Nail, T. (2016). Biopower and control. In: Morar, N. (Ed). Between Foucault and Deleuze. Edinburgh University Press.
- Nussbaum, B. (2010). Is Humanitarian Design the New Imperialism?'. Fast Company. July 06, 2010. https://www.fastcompany.com/1661859/ishumanitarian-design-the-new-imperialism.
- Ogborn, M. (2007). Indian Ink: Script and Print in the Making of the English East India Company. University of Chicago Press.
- O'Gorman, E. (1958). La invención de América. Indiana Press University.
- Olivares Ferreto, Edith. (2007). Migraciones y segregación espacial: El asentamiento de la población nicaragüense en el Cantón Central de San José, Costa Rica. *Estudios Demográficos y Urbanos*, 22(3), 651-688.
- Paasi, Anssi (1999) Boundaries as social practice and discourse: the Finnish-Russian border. *Regional Studies*, vol. 33, Nr. 7, pp. 669-680
- Paasi, A. (2012). Border studies reanimated: Going beyond the territorial/relational divide. *Environment and Planning A*, 44(10), 2303–2309. http://doi.org/10.1068/a45282
- Palmer, S. (2003). From Popular Medicine to Medical Populism: Doctors, Healers, and the Public Power in Costa Rica, 1800-1940. Duke University Press
- Papadopulos, D. and Tsianos, V. (2008) "The Autonomy of Migration: The

- Animals of Undocumented Mobility," in Anna Hickey-Moody and Peta Malins, eds. *Deleuzian Encounters: Studies in Contemporary Social Issues*. Palgrave.
- Potts, K. and Brown, L. (2015) Becoming an Anti-Oppressive Researcher. In: Brown, L. and Strega, S. (Eds.), *Research as Resistance: Critical, Indigenous, & Anti-Oppressive Approaches*, Canadian Scholars' Press, 255-286.
- Quijano, A. (2000). "Coloniality of Power, Eurocentrism, and Latin America." In: *Nepantla: Views from South*, Volume 1, Issue 3, 2000, pp. 533-580.
- Reckwitz, A. (2002). The Status of the "Material" in Theories of Culture: From "Social Structure" to "Artifacts". *Journal for the Theory of Social*.
- Rittel, H., & Webber, M. (1973.) "Dilemmas in a General Theory of Planning". *Policy Sciences* 4 (2): 155-69.
- Rivera Cusicanqui, S. (2018). *Un mundo chi'ixi es posible*. Ensayos desde un presente en crisis. Tinta Limón.
- Sandoval García, C. (2002). Otros Amenazantes: Los Nicaragüenses y la Formación de Identidades Nacionales en Costa Rica. San José, C.R.: Editorial de la Universidad de Costa Rica.
- Sandoval García, C. (2004a). "Are We Costa Ricans Exceptional?" *Revista Envio* January, no.270.
- Sandoval García, C. (2004b). *Threatening Others: Nicaraguans and the Formation of National Identities in Costa Rica*. Athens: Ohio University Press.
- Salazar Parreas, R. (2001) Servants of Globalization: women, migration and domestic work. Palo Alto: Stanford University Press.
- Salazar Parreas, R. (2002) "The Care Crisis in the Philippines: Children and Transnational Families in the New Global Economy." In: Ehrenreich, Barbara and Arlie Russell Hochschild, (eds.) *Global Woman: Nannies, Maids and Sex Workers in the New Economy.* Metropolitan Books.
- Schön, D. (1983). *The Reflective Practitioner: How Professionals Think in Action.*Basic books.
- Shove, E., Pantzar, M., Watson, M. (2012). *The Dynamics of Social Practice: Everyday life and how it changes.* Sage.

- Simon, H. (1996). The Sciences of the Artificial. MIT Press
- Snel, E., Engbersen, G., & Leerkes, A. (2006). Transnational involvement and social integration. *Global Networks*, 6(3), 285-308. http://doi.org/10.1111/j.1471-0374.2006.00145.x
- Sökefeld, M (Ed.). (2015). Spaces of Conflict in Everyday Life: Perspectives across Asia. Transcript.
- de Sousa Santos, B. (2014). Epistemologies of the South: Justice Against Epistemicide. Routledge.
- de Sousa Santos, B. (2016). Epistemologies of the South and the future. *From the European South* 1 (2016) 17-29 .
- Sparke, M. 2007. "Everywhere But Always Somewhere: Critical Geographies of the Global South." *The Global South* 1:1&2, 117–26.
- Spinosa, C., Flores, F., & Dreyfus, H. (1997). *Disclosing New Worlds. Entrepreneurship, Democratic Action, and the Cultivation of Solidarity.* MIT Press.
- Spivak, G. (2008). Other Essays. Blackwell.
- Star, S.L. (1999). The Ethnography of Infrastructure. *American Behavioral Scientist*. 43(3). 377-391.
- Stillwaggon, E. (1998) Stunted Lives, Stagnant Economies, New Brunswick
- Strega, S. (2015). The View from the Poststructural Margins: Epistemology and Methodology Reconsidered. In Brown, L. and Strega, S. (Eds.), Research as Resistance: Critical, Indigenous, & Anti-Oppressive Approaches, Canadian Scholars' Press.
- Tlostanova, M., Thapar-Bjorkert, S., & Koobak, R. (2016). Border thinking and disidentification: Postcolonial and postsocialist feminist dialogues. *Feminist Theory*, 17(2), 211–228. http://doi.org/10.1177/1464700116645878
- Tonkinwise, C. (2014). "Design Studies–What is it Good for?". *Design and Culture* 6 (1): 5-43.
- Tuhiwai Smith, L. (2012). *Decolonizing Methodologies: Research and Indigenous Peoples*. Zed Books.

Vargas Aguilar, J. (2004). Migración internacional en Costa Rica: Características y tendencias en el período 1990-2003. En Consejo Nacional de Rectores y La Defensoría de los Habitantes, *Décimo Informe sobre el Estado de la Nación en Desarrollo Humano Sostenible*. San José, Costa Rica.

Verbeek, P. (2005). What Things Do: Philosophical Reflections on Technology, Agency, and Design. Penn State Press.

Wallerstein, I. (2004) World-Systems Analysis: An Introduction. Duke University Press.

Walters, W. (2002). "Mapping Schengenland: Denaturalizing the Border." *Environment and Planning D: Society and Space* 20.5 (2002): pp.125-136.

Weheliye, A. (2014) Habeas Viscus. Racializing assemblages, biopolitics, and black feminist theories of the human. Duke University Press

Weizman, E. (2007). Hollow Land: Israel's Architecture of Occupation. Verso Books.

Weizman, E. (2012). The Least of all Possible Evils: Humanitarian Violence from Arendt to Gaza. Verso Books.

Van West, C. (1987). Acculturation by Design: Architectural determinism and the Montana Indian Reservations, 1870-1930. *Great Plains Quarterly*. 7(2). 91-102.

Weinreich. P. (2009). 'Enculturation', not 'acculturation': Conceptualising and assessing identity processes in migrant communities. *International Journal of Intercultural Relations*. 33(1). 124-139.

Willis, A. (2006). "Ontological Designing". Design Philosophy Papers, 4:2, 69-92

Winner, L. (1980). Do Artifacts have Politics? Daedalus. 109(1). 121-136.

Winograd, T., Flores, F. (1986). *Understanding computers and cognition*. Intellect Books.