

Just Space:
Material and phenomenal alternatives to cruel and unfortunately-usual architecture

Emilia Cabeza de Baca

A thesis submitted in partial fulfillment of the requirement for the degree of

Master of Architecture

University of Washington

2019

Committee:

Robert Mugerauer, Chair

Erica Loynd

Program Authorize to Offer Degree: Architecture

©Copyright 2019

Emilia Cabeza de Baca

Abstract

Just Space:
Material and phenomenal alternatives to cruel and unfortunately-usual architecture

Emilia Cabeza de Baca

Chair of the Supervisory Committee:
Robert Mugerauer, Chair
Urban Design & Planning Department

Phenomena, such as light and sound, are often weaponized in putative systems. Either through overwhelming the body with stimuli or through sensory deprivation. Phenomena also make place and create indelible connections, and will act as an integral component in restorative justice. Materiality is typically used in putative carceral landscapes to erase and control human experience, so I will use materiality as the conduit for connection between the individual and their environment and will illustrate how that connection contributes to rehabilitation and justice. Research has shown that the greatest increase in incarceration since the 1970s has been with women in rural areas. As the majority of scholarship and design have been oriented toward urban men, special considerations must be made to provide justice for rural women.

For people from non-urban places, bioregional identity is embodied. Knowledge of their home is shared through the air, soil, plants, and seasonal changes. As such, justice should be framed bioregionally, influenced by the following factors: Use of receptive caring approach to create normative user experience; utilization of soft, approachable, durable, changeable, unique materials; emphasizing connection to place-making phenomena; design with community, respond to their needs. My project serves as an exercise in applying emerging, holistic design methods in a culturally relevant manner to model an intuitive, humane, connected justice campus.

Acknowledgments

The Salish people who share our land

The Tulalip, Muckleshoot, and Sammamish who share our water

The queer female in our highest position of local leadership

The Land of Enchantment

My family

The encouragement and guidance of
Dr. Robert Mugerauer, UW- Seattle
Erica Loynd, DLR Group Seattle

The Justice/Civic studio at DLR Group Seattle

Olga Amigud, AtelierJones

Roark Congdon, UW- Seattle

Jack Hunter, UW- Seattle

Dr. Lynne Manzo, UW- Seattle

Jim Nicholls, UW- Seattle

Dr. Devon Peña, UW- Seattle

Bill Valdez, KMB Architects

Dr. Barbara Toews, UW- Tacoma

Dr. Amy Wagenfeld, UW- Seattle

Daniel Winterbottom, UW- Seattle

Greg Woolston, UW- Seattle

TABLE OF CONTENTS

| | Page |
|---|------|
| Introduction..... | 1 |
| Chapter 1: Hard Truths and Hard Spaces | |
| Perspectives of Justice..... | 09 |
| Incarceration Trends..... | 10 |
| (In)Justice Paradigm Reinforced by Design..... | 13 |
| Chapter 2: Non-Punitive Framework | |
| Bioregional Restorative Design..... | 19 |
| Bioregional Design..... | 20 |
| Gender-responsive Design..... | 21 |
| Restorative Design..... | 22 |
| Trauma-Informed Design..... | 24 |
| Normative Design..... | 25 |
| Chapter 3: Design Methods | |
| Phenomena..... | 27 |
| Materials..... | 28 |
| Chapter 4: A Shift in the Paradigm of Just Space | |
| Study Site: Grants, New Mexico..... | 30 |
| Design of Spaces..... | 33 |
| Conclusion..... | 37 |
| Bibliography..... | 39 |
| Appendix A: Glossary and Terms to Know | 43 |
| Appendix B: Restorative Justice Design Tools | 48 |
| Appendix C: Design Process | 50 |

Introduction

Phenomena, such as light and sound, are often weaponized in putative systems. Either through overwhelming the body with stimuli or through sensory deprivation. Phenomena also make place and create indelible connections, and will act as an integral component in restorative justice. Materiality is typically used in putative carceral landscapes to erase and control human experience, so I will use materiality as the conduit for connection between the individual and their environment and will illustrate how that connection contributes to rehabilitation and justice. First, I will share my own experiences and thought processes that lead me to this investigation.

My introduction to “Justice” architecture was in 2003 with images of Abu Ghraib and Guantanamo Bay. I was thirteen and looked to adults around me for answers. As a child, I was taught that torture is wrong, cruel and unusual treatment was immoral, indefinite detention without being charged was inhumane, human beings are innately deserving of the right to a fair trial by their peers, but courts are biased and power corrupts. A “war on terror” had been waged and normal things- thoughts, feelings, behavior, buildings- were weapons of or against terror from the people then-president George W. Bush called “evildoers”. I knew what was right, even though it was now called wrong, weak, naive. The world I inhabited became a bizarre Garrison State.

I began to look around me at my city streets, the public inner-city school I attended, the low-income predominantly ethnic and aged community I grew up in, and I realized I was living in a prison. A carceral landscape governed by fear, suppression of information, and control. Where the elite could decide matters of life and death. Where the powerful exploited weakness. I saw young people, full of unique gifts and insights, treated like criminals for asking questions or speaking out of turn. I saw those people drop out of school altogether. I saw those people develop drug addictions or be coerced into engaging in criminal behavior so as not to be alone. I was angry and heartbroken, but I was institutionalized. As such, I knew my peers and I could not afford to just be angry and afraid. We would have to confront the horrific, confounding construction of injustice to create Just space. We would have to become designers.

Toward the end of my undergraduate architectural education, I read a Truthout article entitled “Cruel and Unusual: Texan Prisoners Face Deadly Heat and Contaminated Water”. The article detailed how in the Summer of 2011, extreme temperatures and facilities’ architectural deficiencies contributed to twenty-two confirmed heat-related deaths, one hundred heat-related illnesses, and many more unconfirmed deaths. The article went on to describe in necessarily gruesome detail the infrastructural and social neglect of these prisoners. Again, human life was being inhumanely eviscerated, but not because of a threat to national security or to maintain social

control, but because of judgment and time that has been passed over their body. It was at this point I had another realization, I was contributing to this paradigm because I was experiencing freedoms that others were denied. I was complicit in injustice.

I was also contributing to injustice because as an emerging design professional, someone dedicated to ensuring the quality of life, safety, and beauty, I had never thought about designing justice facilities. Some believe that architects should not design prisons because they are intrinsically torturous places. This would be akin to believing that architects should not design hospitals because they are intrinsically sickening places. Buildings are ecosystems, giving life to myriad of beings and experiences. Buildings only torture because humans design them to. So humans should only design just spaces that promote life and dignity. The group Architects/ Designers/ Planners for Social Responsibility (ADPSR) advocate for “society where investments are made in buildings that lift people up, and where willful human rights abuses are a thing of the past.” 20th and 21st-century prisons are typically discussed in the context of their place in mass incarceration or the Prison Industrial Complex. Examples of carceral landscapes, social and environmental experiences that confine, punish, enslave, intimidate, and betray. Structures of oppression and abuse have no place in the world, and the protection of human rights should underlie all design decision making. If architects walk away from this sector, those who step forward will likely only contribute to the exploitative expansion of unjust spaces, namely the Prison Industrial Complex (PIC). A great amount of scholarship exists around the damage done by the PIC (including mass incarceration and the school to prison pipeline) is extensive and I have referenced a few relevant pieces in this document; Alexander (2010), Davis (2011), Foucault (2012), Richards (2017) are fundamental readings around this topic and great entry points for this hugely complex issue. I hope readers will take it upon themselves to learn more about this issue so as to advocate for its abolition, but my investigation is into positive alternatives.

Refusing to build unjust spaces is not a sufficient solution. Just like refusing to build sickening spaces does not resolve illness. Design teams and our partner-clients must unanimously refuse injustice itself, the refusal of injustice at all levels. As Dr. Angela Davis writes in *Are Prisons Obsolete*, “As important as some reforms may be- frameworks that rely exclusively on reforms help to produce the stultifying idea that nothing lies beyond the prison. Debates about strategies of decarceration...should be the focal point of our conversations on the prison crisis...”. To create justice, we cannot only change our methods of punishment. Therefore, rather than designing a better prison the focus of this paper is to develop a framework of justice to dismantles exploitative structures and repair broken connections, to give designers tools for questioning.

In my own process of questioning, I began by asking who the people are that we are incarcerating. What are the incarceration trends indicating for the coming future? Projections indicate that due to the current political climate, prisons will continue to be built prolifically through the coming decade. The population most represented by this issue are low-income individuals, more specifically low-income women. The geography most harmed is rural communities, especially former industrial zones or Superfund sites. Through focused research; conversations with women residing in a justice facility in Tacoma, Washington to develop a master plan of a healing landscape; and mentorship from Justice and civic design experts it became clear that justice campuses based on environmental and restorative justice is our time's best actionable solution.

My proposed site in Grants, New Mexico is home to a number of prisons and detention centers and its geography makes it susceptible to, but it is also the sort of place where families live with the land for generations, the sort of place challenged by drug-related crime, the sort of place gifted with complex natural beauty. For people from non-urban places, bioregional identity is embodied. Knowledge of their home is shared through the air, soil, plants, and seasonal changes. As such, justice should be framed bioregionally, influenced by the following factors: Use of receptive caring approach to create normative user experience; utilization of soft, approachable, durable, changeable, unique materials; emphasizing connection to place-making phenomena. Design with community, respond to their needs. My project serves as an exercise in applying emerging, holistic design methods in a culturally relevant manner to model an intuitive, humane, connected justice campus.

Since this design process was carried out over 10-weeks, without interviews from staff or residents, and without details about the selected building's space or program there is much work still to be done in this exercise. This project is intended as an introduction to issues, not a solution. My appendix sections contain design tools and methods that were helpful in my process and may act as the starting point for future inquiry.

Perspectives of Justice

The current paradigm of injustice has led to the perspectives listed below. These statements were expressed to me over my research:

- Prisons need to be scary to deter offending. If people are afraid, they will obey.
- Criminals deserve to be punished. Acceptable punishment can include starvation, sensory deprivation, physical and psychological torture (rape, humiliation, blackmail, coercion).
- The worst of the worst should be strictly contained for the rest of their life.
- White-collar crimes (fraud, embezzlement, cybercrime...) are less serious than other non-violent crimes (sex work, substance-related crimes, arson, trespassing...) and don't deserve the same attention/punishment.
- Private companies take the burden of management of local and federal government
- Mass incarceration is the most efficient form of administering justice.
- Offenders should be put to work in agriculture, garment products, and other forms of labor without pay.
- People who have committed crimes should be given fewer rights than citizens without a criminal record.
- Certain people are innately dangerous and pose a serious threat. They should be controlled.
- Architects should not design prisons.
- **I'm not a bad person, so this has nothing to do with me.**
- **I don't want to think about this.**

These perspectives are simultaneously troubling and valid, and although I do not agree with any of them, I can find resonant truths in each. The two that I think are most dangerous are the last two. First, the thought that some people *are good* and others *are bad*, that some people are free and others will get what is coming to them, is deeply problematic. It is divisive and simply false. Additionally, closing off the mind and soul to painful, complex issues does not equip a person to process and live with those issues. The issues do not go away, the avoidant only becomes more disconnected. Norman Johnston articulates this issue in the following excerpt of Forms of Constraint:

“The ambivalence that citizens throughout the world have shown toward incarcerated criminals allows cycles of humane concern and reform efforts to alternate or even coexist with periods of impatience with the criminal justice process and the desire to make imprisonment rigorous and unpleasant... “today, however, we may once more be entering a period of innovation, vitality, and creativity” (Johnston, 2000)

While this project can not change anyone's perspective of justice by itself, it can provide information, insights, and inspiration that may not have been previously available. Perspectives have little to do with *being* right, and much to do with *feeling* right. Perspectives shift with feelings, and that dynamism will lead to collective but idiosyncratic development.

National Incarceration Trends

Why should designers get involved? Because incarceration is increasing, and we have committed our lives to health and safety. The population in locally-run jails increased almost 4.5 times from 1970 to 2015. This growth was greatest in small, rural counties- even though they have substantially and consistently lower crime rates compared to urban areas. This growth can be attributed to two factors.

First, rural jails have the highest rates of growth in pretrial detention in the country. While overall rates of pretrial detention have risen nationally, the highest rates are in rural counties across all regions of the country. Pretrial incarceration rates in rural counties increased 436% between 1970 and 2013.

Second, financial incentives encourage rural jail systems to house individuals from other authorities. A growing number of rural jails— mainly in the South and West— are renting out jail beds to hold people for federal, state, and other local governments. In many cases, jails build new capacity to meet external jail bed demands unrelated to crime in their own jurisdictions. In 11 states in the South and West, for example, more than 30% of people in jail were held for other authorities. (Kang-Brown 2017) For these reasons, New Mexico was selected as the site for this design project. An investigation of incarceration rates in New Mexico validates these trends (fig. 1 and 2). These trends are particularly staggering for female populations.

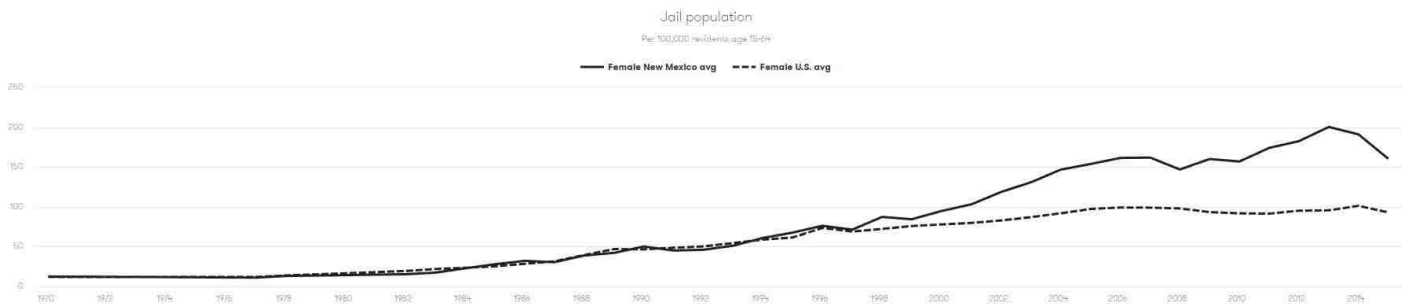
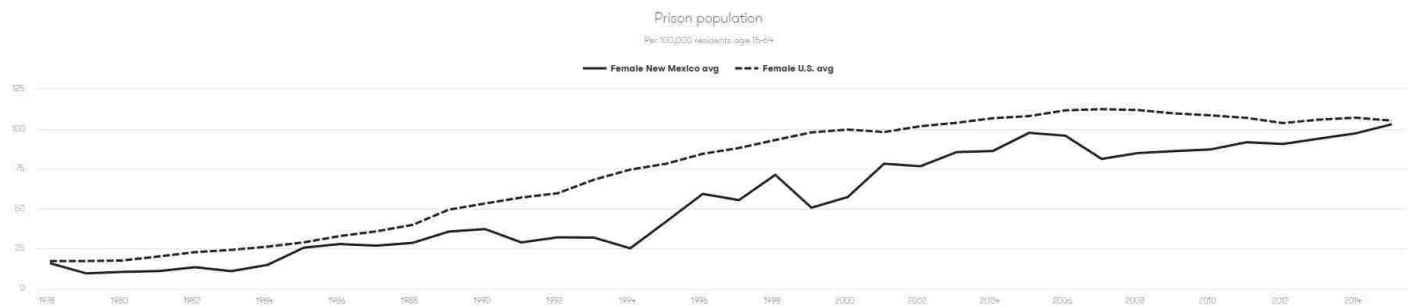


Figure 1. Graphic generated with the Vera Institute for Justice Incarceration Trends Data tool. New Mexico’s Female Jail population is roughly 1.7x national average, with rates dramatically increasing in New Mexico around 2001 when the “war on terror” was waged and border states were declared war zones.



* only one dataset can be displayed when comparing race/ethnicities or genders

Figure 2. Graphic generated with the Vera Institute for Justice Incarceration Trends Data tool. New Mexico Female Prison population has been below the national average by varying degrees since the late 1970s, but the numbers are showing signs of becoming equal. If this trend continues, New Mexico could surpass the national average.

Though nationwide growth of female incarceration is 14x what it was in 1970, growth in small, rural counties has increased 31-fold. In an interview with the Albuquerque Journal, Linda Freeman, executive director of the New Mexico Sentencing Commission, said that from 2001-2018, the number of women in prison has increased 41%. In February of 2018, the state reached the highest number of incarcerated females in the state's history, 797 females. Incarcerated women are not simply "offenders". They are people with very complicated lives who are trying their best, and often lack support or opportunity

Economic marginalization is a leading contributor to female crime, as economic pressures increase women act out to survive. Additionally, when women are relegated to the household their activities are restricted, while men are able to maintain power and dominance over economic resources (Parker 2008). In rural areas, the time following the exiting of a relationship is much higher for rural women- who experience intimate partner violence at rates 3 times higher than for women in cities and 1.6 times higher than suburban women. Rural women often lack support and access to refuge or defense against abuse (Rennison 2012). The majority of women in jail and prison are charged with lower-level, non-violent offenses, mostly property and drug-related (fig 3). Women tend to have less extensive criminal histories than their male counterparts, are

Figure 3. Demographic diagram generated by author, with data from the Vera Institute for Justice and the Sentencing Project.



less likely than men to make bond, typically receive fewer visitors, are more likely than men to plead guilty, and spend less time in prison libraries studying law to reduce their sentences- opting instead to develop skills and expand knowledge. Justice systems, practices, and policies are typically designed for the majority of the incarcerated population, men, meaning that there is a lot of progress to be made in equitable justice for women. Small, rural justice systems typically have limited resources, so jails are often ill equipped to address the challenges their female residents face.

All of this can lead to serious and lasting public safety and community health implications (Swavola 2016). U.S. Attorney General Loretta Lynch stated at the White House Women and the Criminal Justice System Convening on March 30, 2016: “Put simply, we know that when we incarcerate a woman we often are truly incarcerating a family, in terms of the far-reaching effect on her children, her community, and her entire family network.”

Women in jail are disproportionately of color, overwhelmingly poor and low-income, survivors of violence and trauma, and have high rates of physical and mental illness and substance use; nearly 80% of women in jails are mothers, but unlike incarcerated men, they are mostly single parents, solely responsible for their young children and older family members. In one study of incarceration, it was found that by the time women were placed on probation, at least 60 percent had lost custody of their children (Berman 2005). Many criminal justice considerations and structures are designed for men. Contemporary feminist criminologists are scrutinizing the impact custodial classification, sentencing and assignment, has on incarcerated women and the programs and facilities available to them (Farr 2000).

So how is this information to be interpreted? We have populations of women who are hugely important to their communities, who have been hurt and never allowed to heal, and are then taken from their communities. While in custody, they are further mistreated. When they are released, their connections to friends and family have been compromised, they will have even greater difficulty finding work, being able to vote, or getting into or paying for college. When over half of the population is completely stripped of human rights, the half that are responsible for carrying on tradition and care-giving as well as operating businesses, the entire community is being slowly killed. I will leave it to the reader to determine why the designers and benefactors of the Prison Industrial Complex target poor, rural women; why these women have been selected for indentured servitude, why these women are forced to perpetuate cycles of dependence, victim-hood, and poverty. What do powerful people have to gain through this abuse of life?

(In)Justice Paradigm Reinforced by Design

This chapter outlines four major structural failures that use different scales of design to perpetuate injustice.

- Disinvestment from communities- political neglect through planning
- Disinterest of design professionals to engage in public safety, justice, or rural projects
- Carceral landscapes- Schools, hospitals, and cities governed by fear
- Mass incarceration- generalized containment and exploitation of life; damaging to social and ecological landscapes

Disinvestment of Rural Communities

Many rural communities are seen as having little to no value within Neoliberalism. Their value lies in connection to place through subsistence, rather than consumption and production. Youth are encouraged to leave their home communities and go to the city, while older people remain until their last days. When we take into consideration that rural women are more likely to be depended on by multiple people, be harmed more often, and have fewer options for independence and wellbeing it appears that these communities are being washed of human life.

As female U.S. Citizens are systematically destroyed, as are female immigrants. Latinas are treated as terrorists in rural communities, as the threatening foreigner. Nativism delineates between the national body, “conceived as founded on a bounded and distinct community which mobilizes a shared sense of belonging and loyalty predicated on a common language, cultural traditions, and beliefs”, and new arrivals with their own “lifestyles and traditions”. Immigrants are seen as “incompatible” and threatening to this body (Inda 2007).

Powerful groups who benefit from the destruction of the Earth understand the major importance of women to these places, and know that destruction of place begins with women and their children. These same places become Superfund sites or have transmission lines running through them. Their water becomes contaminated, their valleys turn to deserts, their animals die. The destruction of people invested in their bioregion allows the bioregion to be destroyed.

Hesitance of Design Professionals

There is little overt professional benefit to building in rural areas. There is equally low professional interest in designing public safety or justice facilities. Public servants have

Carceral Landscapes

In *Tight Spaces*, Robert Sommer describes characteristics of “Hard Architecture” and the “Surveillance State of Mind”, key components of carceral landscapes, spaces designed to punish wrong-doing and spread fear. At the heart is the Neoliberal idea that providing decent housing or services ‘rewards’ poverty or criminal behavior, i.e. people won’t be deterred from crime if the consequences are not sufficiently frightening. Takes the position that confinement and removal from society are insufficient punishment and that the transgressor must be punished still further during institutionalization; e.g. panopticon, engineered over-stimulation, uncomfortable space, environmental toxicity.

Hard architecture is easily recognizable when a pedestrian takes notice of surveillance cameras, security officers, and Crime Prevention Through Design (CPTD) tactics like wall surfaces that cannot be scratched or painted, “skatestops”, and bird spikes. The systematic hardening of the environment is veiled as increasing security, but its primary goal to maintain order, discipline, or control. These types of spaces can come in the form of a street, public park, or public school.

Examples of Hard Architecture include:

- Lack of permeability
- Expansive freeways
- Suburban sprawl destroying natural spaces
- Redirecting waterways
- Prohibitive expense of construction/alteration
- Clear differentiation of status levels
 - Pragmatic/temporal segregation
- Passive adjustments that encourage psychological withdrawal
 - Little opportunity for experimentation or change
- Security assigned to specialized agency, rather than occupants themselves
- Materials and furnishings selected for economy and durability
 - Produces monotony/informality in design/layout
- Constant surveillance

Sommer describes this normalization of institutionalization, the “Surveillance State of Mind” thusly:

“In the beginning a person feels uncomfortable about the presence of armed police in the bus station or shopping center. Later [they feel] uncomfortable if [they] can’t see a [police officer].”

This sentiment was echoed during the public review of this research, a university professor and architect remarked “when I design a new school, one of the first questions parents and teachers ask is ‘how are we going to ensure security?’” The author goes on to articulate how the subtle symptoms of institutionalization are profoundly dehumanizing:

| Symptoms | Change in Person | Change in Outside |
|----------------------|--|------------------------------------|
| De-Individuation | Dependence upon institution, loss of capacity to make decisions | - |
| Disculturation | Acquisition of new values unsuited to previous community | - |
| Damage | Loss of status, security, etc. | - |
| Estrangement | - | New technology, architecture, etc. |
| Isolation | Person and outside remain unchanged but contact between them is lost | - |
| Stimulus Deprivation | Acclimation to new sensory patterns | - |

- De-Individuation: The reduced capacity for independent thought and action. The inmate becomes a so-called mass man, capable of little spontaneous activity. E.g. unquestioning acceptance of routine and the tendency to allow others to make important decisions; “nestling process”, wanting to stay institutionalized after being discharged.
- Disculturation: The individual acquires institutional values and attitudes unsuited to his previous culture. He may acquire a special vocabulary or language or outlook that differs from the previous one. It may be difficult or even impossible for an individual to settle down again in his former community.
- Damage: Psychological, social, and physical pain persists beyond the institutional experience. This damage does not have an explicit correlation to the length of confinement, it is a combination of circumstance. Damage can also come from stigma following release that follows the individual and restricts their exercise and possession of rights
- Estrangement: The outside world changes rapidly while the individual is away.
- Isolation: Individual can lose touch with the world and be forgotten, by family, friends, and community”
- Stimulus Deprivation: An individual is comfortable with a daily rhythm very different from the outside.

Now that we know how these characteristics are expressed, we will place them at the planning scale first in rural communities and then the personal scale of sleeping rooms and the interiors of contemporary prisons.

Security Classifications and Architectural Implications

This section was developed as an adaptation to glossary terms found in Prisons., but clarified by criminal justice and justice design professionals. Classification for prisoners who do not have any special categorization related to disciplinary, segregation, protective custody, or other needs. The general population is divided into security levels (minimum, medium, maximum/low, medium, supermax, high/Level 1, Level 2, Level 3, etc.).

Protective custody (PC)/Special Housing Unit (SHU): Solitary confinement, often justified as a way of ensuring a prisoner's safety. When placed in PC/SHU the prisoner is housed away from others, usually alone in a single six-foot by nine-foot cell. They are not allowed to participate in general population activities, such as going to the rec yard, chow hall, open visitation, classes, or church services. They are also more heavily guarded when being transported from one place to another. Fig. 4

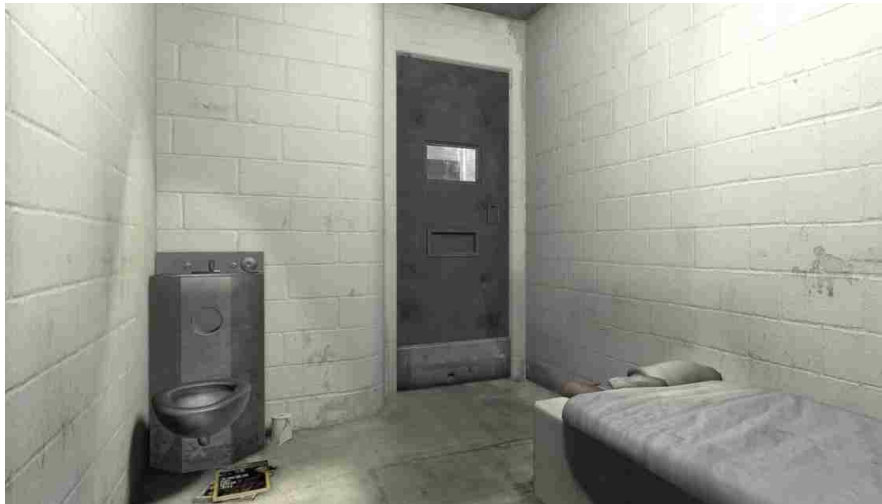


Figure 4. Computer generated interactive experience of a six-foot by nine-foot SHU/PC cell

Minimum Security: A housing facility with perimeter fencing and/or a posted perimeter. Residents sleep in cells, either alone or with roommates, which are rooms or dormitories. Movement in and out of the housing unit is conducted under guarded surveillance. Fig. 5



Figure 5. Images of Federal Prison Camp in Alderson in West Virginia.

Medium Security: A housing facility with single or double perimeter fencing, armed correctional officers stationed in a guard tower and/or on roaming patrol. Housing units are made up of cells, rooms, or dormitories, typically arrayed in and stacked in a block formation, that can house twelve or more residents. Movement in and out of the housing unit is via trap gate or sally port. Also known as Federal Correctional Institutions (FCIs). Tend to house inmates with a history of violence. Staffing levels are higher than at low-security FCIs, but lower than at high-security federal prisons. Prisoners must have less than 30 years remaining on their sentences to be housed in these facilities. Most prisoners are permitted to be housed at medium-security (Fig. 6)



Figure 6. Examples of medium security sleeping rooms.

Maximum Security: Also known as United States Penitentiaries (USPs), these are the highest regular security federal prisons. Similar to medium security, but with additional security and greater restrictions. All types of prisoners are permitted to be housed in USPs, though some, such as sex offenders and informants, have a hard time staying due to violent acts perpetrated against them (Fig. 7).



Figure 7. Examples of maximum security sleeping room (left) and perimeter security (right).

Administrative Segregation Units (ASUs): Individuals are often housed in ASUs pending outcomes of disciplinary hearings. Short-term needs can be satisfied in a local facility, whereas longer or indeterminate sentences can be served in SHU. An example can be contemporary ICE detention facilities. Facility design varies greatly. It is unknown how many people are in ASUs. (Fig. 8, Fig. 9)

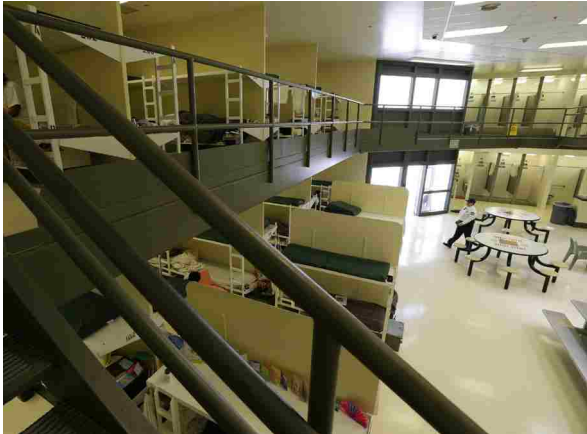


Figure 8. Detention centers as open, partitioned spaces (left) Figure 9. Detention as caged areas with sleeping mats (right)

Super-maximum Security (Supermax): Control-unit prison, or units inside a prison, with the highest levels of security in most countries. The function of these facilities is long-term housing of individuals posing the greatest security risks in the population. Sentence can be anywhere from twenty years to a dozen consecutive life sentences. Most are held in single cells, and are restrained during movements outside their cells. These units are notorious for long-term isolation, which could last for twenty-three hours a day, as well as sensory deprivation. If rooms have a window, it may only be four-inches wide and forty-inches high. Rooms are typically twelve-feet by 7-foot enclosed solid walls held within bars. Fixtures are a stainless steel combination toilet/sink and a shower with a timer, furniture includes a built-in concrete desk and stool, the mattress rests on a concrete slab. All food is presented through a slot in the door, inmates remain in cells for visits with clergy or physicians. (Fig. 10 and 11)



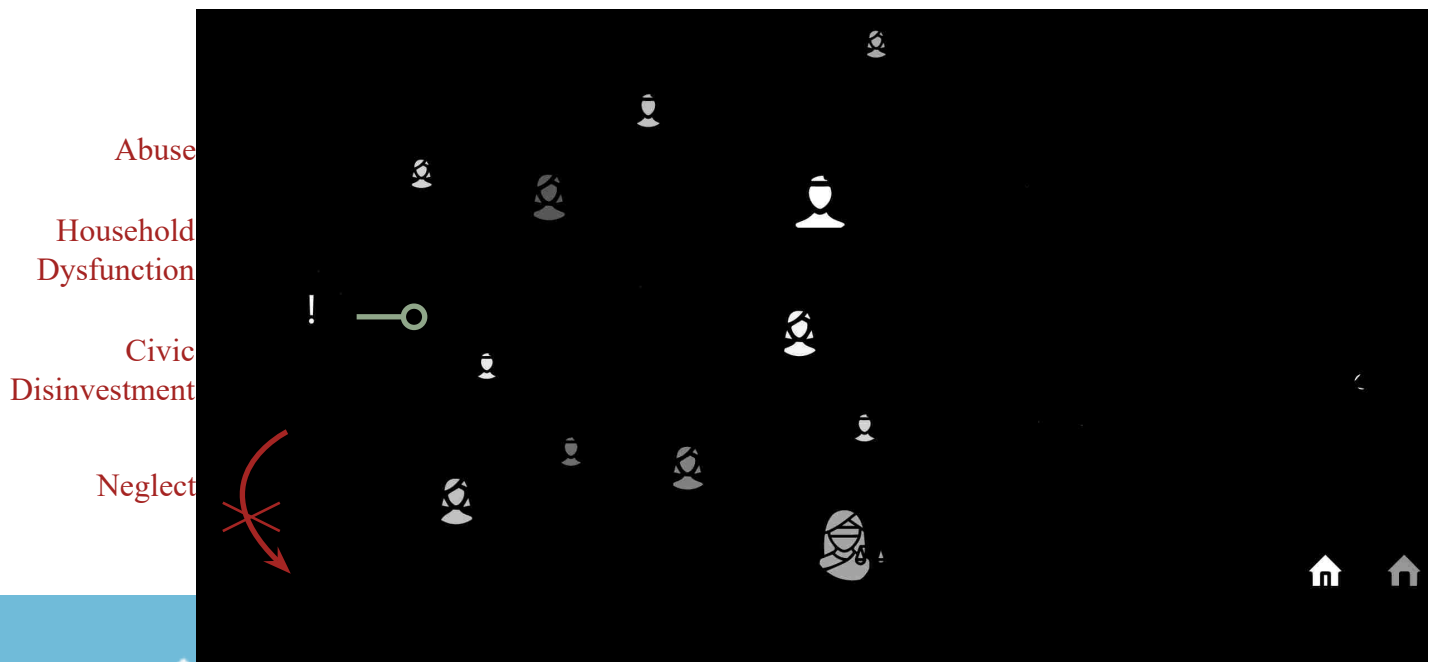
Figures 10 and 11 Images of a sleeping space at Administrative Maximum Facility (ADX) in Florence Colorado

Non-Punitive Framework

I hope it is clear now that punitive justice is an ineffective, cruel oxymoron. Moving forward, there are various design methods that result in spaces conducive to healing and wellbeing. Underlying all of them is the shift from institutional structures of punishment toward networks dedicated to antagonistic balance, where individuals are regarded as unique, valuable members of a whole (**fig. 12**). When wrong-doing occurs, those connected to the occurrence meet when they feel safe and comfortable to discuss and repair the imbalance. If an individual does not immediately belong to a supportive, safe community, one will be availed to them.

People of age or youth, and non-violent members of the community who have done wrong will not be housed in a long-term facility, rather they will be given resources they need to lead fulfilling, meaningful lives and pursue goals. Although women tend to be one-time offenders of non-violent offenses, there will always be a need to care for particularly violent individuals. If an individual has committed or is planning to commit an act of harm against themselves or others, they will receive additional social support- the goal being to allow for freedom of expression and development of identity without endangering members of the community. These individuals will be housed in normative, culturally relevant living facilities akin to boarding houses, campus dormitories, assisted living housing, healthcare, and hospitality setting. In the following sections, I will detail the most helpful elements of progressive, holistic design considerations.

Figure 12. Graphic illustrating pathways that may lead women to wrong-doing; rather than being immediately shackled and held captive, they spend time in a safe environment with criminal justice and health professionals as well as members of their community to discuss wrong-doing on individual woman's timetable; the only difference between care for women with and without violent histories is the level of guidance, safety, or assistance provided.



Bioregional Restorative Design

We are not familiar with structural failings of punitive justice design. In the next sections, I will discuss design theories that shaped this design. Since punitive justice is all about top-down control through surveillance, rigidity, anonymity, and disembodiment- the answer is a system that uses receptive caring approach to create normative user experience; utilizes soft, approachable, durable, unique materials; emphasize connection to place-making phenomena; and design with community, responding to their needs.

In the following sections, I will explain this structure more.

Bioregional Design

Peter Berg describes a bioregion as “the geographical terrain and a terrain of consciousness to a place and the ideas that have developed about how to live in that place... The final boundaries of a bioregion are best described by the [beings] who have lived within it, through the recognition of the realities of living-in-place.” To belong to a bioregion is to *reinhabit* that space. Reinhabitation is fully Being in and with a place. As Berg writes, “it involves applying for membership in a biotic community and ceasing to be the exploiter.”

Bioregional Design Values:

- Of-place
- In-tune with natural cycles
- Respectful of non-human species
- Based on longevity and balance
- Subsistence, rather than consumptive, lifestyle



Figure 13. Images of a sleeping space at Administrative Maximum Facility (ADX) in Florence Colorado

Pueblo Bonito

Design: Anasazi Puebloans

Client: Anasazi Puebloans

Project Year: Between AD 828 and 1126

Location: Chaco Canyon, New Mexico, USA

Area: 3 acres

Status: National Landmark, open for tours

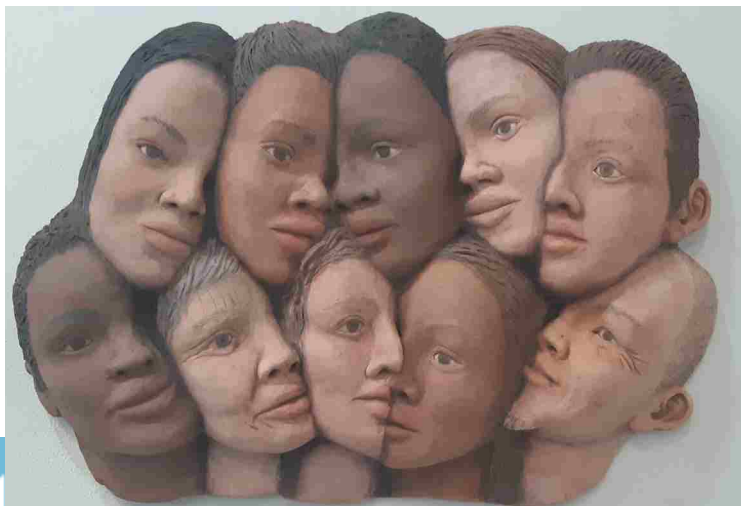
Gender Responsive Design

Of all the design guidance listed in this document, Gender Responsive Design is the most encompassing and the least defined. This is likely because design, policy, and medical choices in the United States have long been made exclusively by cis-gendered men. It could be argued that a startling number of powerful cis-gendered men are disinterested in or threatened by females (or any non-cis-gendered male) having safe, equitable space in the world (Luibheid 1998, Parker 2008). Each gender identity is unique, the recommendations below are intended to be generally applicable to large, diverse groups of women. For instance, although not all women are or will ever be mothers, all women should have access to healthcare; while social connection is very important to women, women from different groups connect very differently. Complimentary to Strengths-Based, Culturally Relevant, Trauma-Informed, and Age-Specific Practices (Davis 2016)

Gender Responsive Design Strategies:

- All or mostly female staff
- Involve female residents in design process
- Obstetric/Gynecologic services
- Increased privacy
- Sense of personal safety
- Mother-Child Programs
- Childcare
- Elderly care
- Opportunity to form friendships
- Close to home communities (if healthy)
- Non-binary, universal restrooms
- Age-appropriate education, health services
- Avoid re-traumatizing practices like isolation and restraint, eliminate during childbirth
- House transgender people where they feel comfortable
- Community-based treatment programs for co-occurring issues

Figure 14. Ceramic sculpture created by New Mexico artist. *We*, Jacquite Beddo. 2019



Restorative Design

As opposed to punitive justice, based on the punishment of offenders, Restorative Justice focuses on repairing, or creating, wellness for the victim, offenders, and communities by attending to their human needs. These needs can be experienced physically, psychologically, emotionally, and spiritually. Indicators of wellness through restorative justice could be reduced trauma and stress, increased empathy, and positive social connections (Toews 2006). Restorative justice holds offenders accountable for their actions, which requires a degree of regard and empathy for others and seeks to reduce recidivism, programs invite the offender to confront substance abuse; mental illness, and past experiences with abuse and victimization. Justice employees, especially correctional workers, struggle with their own mental health issues such as compassion fatigue or PTSD which impact their job performance and the quality of their personal lives. Justice professionals experience high rates of stress, depression, substance abuse, and suicide (Ferdick and Smith, 2017). Corrections staff also typically have lower lifespans (Lindemuth 2007, Wagenfeld 2018). Restorative design is complementary to Salutogenic design, which guides hospital architecture, and Normative Design.

Environmental design research offers insight into how the built and natural environments can positively influence health and wellness. From that research, the following design considerations can be made for specific members of the ecosystem.

Restorative Design Values:

- Intended to improve physical, emotional, and mental health
- Small, quiet, and private living spaces
- Comfortable and flexible common/family spaces
- Easy to maintain/clean
- Eliminate excessive noise
- Non-linear designs
- Refuge (Victims)
 - Protection from outsiders and a sense of safety
 - Accessible and straightforward spaces and activities
 - Opportunities to engage with nature and be outside
 - Space for different activities and interactions
 - Play facilities for children
- Access to and interaction with nature (Offenders as well as staff)
 - Wildflowers
 - Production gardens
 - Outdoor classrooms
 - Walking paths
 - Horticulture
 - Connection with animals
- Outdoor privacy for decompression (Staff)
- Community investment from government

Figure x Design for a master plan of a restorative landscape throughout a women's justice facility in Gig Harbor, Washington.



Self Recovery-Discovery

Team: Cabeza de Baca, Emilia (MArch)

Iversen, Lauren (MLA)

Koo, Michelle (BLA)

Zhang, Wenshuo (MLA)

Client: Washington Corrections Center for Women

Project Year: 2018

Location: Gig Harbor, Washington

Status: Proposed



Art is a way of knowing the world

Trauma-Informed Design

According to the U.S. Department of Health and Human Services Office on Women's Health, 55-99 percent of women in substance use treatment and 85-95 percent of women in the public mental health system report a history of trauma, most of which occurred in childhood. These occurrences are also called Adverse Childhood Experiences, which have been linked to likelihood of offending later in life. Trauma-informed design brings care into everyday spaces, creating supportive environments that resist retraumatization and reduce the likelihood of offending. (See Richardson 2018 and Adverse Childhood Experiences Journal Articles by Topic for additional information and recommendations) Complimentary to Universal Design and Normative Design.

- Minimize unnecessary and overwhelming ambient noises
- Promote opportunity for individual choice in balance with everyone's safety and comfort
- Limit visual complexity, such as distracting patterns on the walls or flooring
- Ensure adequate lighting that does not buzz or flicker
- Provide clear and consistent signage
- Provide adequate space to navigate around each piece
- Ensure design is culturally sensitive and relevant
- Create a balance between social spaces and private spaces
- Respect communication needs
- Reduce or remove identified adverse objects and stimuli



Figure 15. The OOIO design team expressed the following sentiment about their work that speaks well to a Trauma-Informed approach: “We started this project with the team asking people who live and work in the establishments what it felt like. The conclusion was that the worst thing about living in a correctional facility is the feeling that you are actually in one.”

FEMALE PRISON IN ICELAND

Design: OOIO

Team: Millán Villamuelas, Cristina Vicario del Cojo,
Lourdes Martinez Nieto.

Client: Private

Project Year: 2012.

Location: Reykjavik, Iceland

Area: 4,500 m² (48437.6 ft²)

Status: Competition. Design Development.

Normative Design

Design free of stigma, feels like a “normal” school, residence, or third-place. Gaining popularity in corrections and healthcare for contribution to improved mental health and social connection. Rejects manipulative or traumatizing panopticon, linear/rectangular layouts. Correlated to improved outcomes.

(Beijersbergen)

- Courtyard Designs
- Small living units similar to college dorms or assisted living suites
- Access to kitchens, outdoor areas, and community spaces
- Staff monitors residents on their level, fostering more positive relationships
- Panopticon and Radial Architecture design has the most negative impact on mental health because inmates feel isolated and constantly watched.
- Rectangular layouts: Rectangular buildings feature one central observation area that overlooks rows of cells. Like panopticon architecture, rectangular layouts cause incarcerated individuals to feel secluded and continually scrutinized.

Future institutions:

- Direct, barrier-free, supervision
- Avoid remote observation, opt instead for active association
- Civilian-quality furniture and sanitary equipment
- Smaller housing units as opposed to extensive cellblocks
- Based on inmate needs (safety, privacy, personal space, activity, family contacts, social relations, etc.) (Johnson 2000, pg 153)

Figure 16. A typical sleeping room at Halden Prison in Norway. Normative Design is increasingly common in Norwegian justice facilities and are credited as contributing to their remarkably low recidivism rates. Norway’s recidivism rate is 20%, while that US is at 76.6%. <https://www.nij.gov/topics/corrections/recidivism/Pages/welcome.aspx>



Halden Prison
Design: Erik Møller Architects & HLM Architects
Team: Millán Villamuelas
Cristina Vicario del Cojo
Lourdes Martinez Nieto.
Client: Norwegian Department of Justice and Statsbygg
Project Year: 2010
Location: Østfold, Norway
Area: 27,500 m² (296,007.54 ft²)
Status: Competition. Completed

Design Methods

- Bioregional restorative design to inspire justice design teams and clients
- Assumes that non-violent offenders are not held for more than 24 hours without trial
- Provides a supportive community for individuals who have hurt themselves and/or others

In designing this project, many intersections between design framework arose and converged into Bioregional restorative design. It also became clear that significant changes would need to be made to policy, sentencing, and education. I also worked alongside classmates to confront our own internal prisons so that we could get free. Working in justice is emotionally exhausting. One moment, furious and the next devastated. This turbulent experience is part of the justice design process. I hope future designers get as upset about these challenges as I do.

I also developed a number of tools which can be found in the appendix. These tools helped me through my process and I think they are simple and flexible enough to be adapted for schools and hospitals, youth and elderly populations. Designs of this type are like icebergs, much more beneath the surface than can be seen. To engage in this sort of work requires patience, optimism, and the ability to collaborate.

Phenomena

Pallasma said in *Eyes of the Skin* that vision is the sense of distance while the others are senses of proximity (Pallasma 2012). Sensations are perceived as they pass over, wrap around, infiltrate the body.

In *Death and Other Penalties: Violence of Supermax-Phenomenological Aesthetic*, it is well shown that phenomena are weaponized in the context of mass incarceration and the PIC. Bare Space, like the idea of bare life, is homogeneous and featureless, experientially hostile. “In being designed and built into the very form of the supermax, a basic mode of hostility thus pervades the spaces of the prison, and it is a hostility that modally constitutes the violence of these facilities” (Switzer 2015). Sound and light are typically used to keep inmates on edge, in a perpetual states of fear. Extremes of heat and cold remind individuals that they do not deserve comfort. Limitation or elimination of views outside is dismembering and alienating.

To build with phenomenology in mind is to design the volume, rather than the container. To allow many different lifeforms to share space with you or shape the space around you. Memories are made (Spear 1994), lessons are learned (Berg 2014).

Figure 17. Birdsnest. Bird song acted as wayfinding to nest.



Materials

Justice is only achievable through acceptance, of others and ourselves and both as one. When we accept ourselves, we accept our beauty as well as our brutality. We can then accept those qualities in others, knowing that this duality is intrinsically human. How do we fold acceptance into architecture to design justly? We must wrap the individual in a material world that facilitates vitality, which allows them to sense their belonging and worth, we touch skin to skin. Materials share our breath, they give and take the heat, they share our passage of time and record our histories in a language truer than we can speak. Materials can improve our health, reimagine waste, express our heritage or our fantasies, transform our worlds or remind us of home- materials provide beauty. Populations that have the least control over their lives, are subject to the most judgment, carry the greatest stress deserve to be embraced by beautiful design.

Material Health:

The Living Building Challenge's Materials Petal masterfully articulates the significance of healthy materials: "Throughout their life cycles, supplies and materials are responsible for many adverse environmental issues, including personal illness, habitat and species loss, pollution, and resource depletion (Cascadia Region Green Building Council 2008)."

Both WELL and the Living Building Challenge aim to eliminate the worst known offending materials and practices from manufacturing processes while encouraging the development and sale of healthier alternatives. Companion endeavors like the Living Product Challenge and the Red Light address components of the material world not discussed in other channels.

"The material quality of a space, how the design of that space promotes physical activity and social interactions, and other architectural features, such as access to natural daylight, views, and biophilic elements (i.e., design that contains or emulates aspects of nature), are documented to have significant impacts on human physiology and mental health" (Yang 2018)

Tools like Life Cycle Assessments and resources like Environmental Product Declarations are becoming more common, and the conversation of material health will become ubiquitous.

It is no accident that institutions are predominantly made of concrete (Forty 2013). Stable, anonymous, enduring, fireproof, simple, and modern- just what an institution hopes to be. Materials speak to the embodied, intimate character of a place. Earth and human artifacts, like glass bottles and tires, speak to symbiosis and cyclical life. Composites speak to creativity and resilience.

A Shift in the Paradigm of Just Space

Study Site: New Mexico

New Mexico is a unique, dreamy place where people make food the way their great-great-grandmother made it and take time to appreciate the soil it came from. As mentioned earlier, New Mexico is exactly the kind of site that is targeted for exploitation from the Prison Industrial Complex. As a state that is predominantly people of color, with over half of the population being female.

Born in New Mexico: 58%

Female Population: 51%

Median age (Female): 38.9

Ethnicity: Predominantly Hispano*

Corrections facilities: 11

- State-operated: 6
- Privately operated: 5
- Female specific facilities: Unknown

*Hispano is a term for people descended from original Spanish speaking settlers of what is now southern Colorado, northern New Mexico, and parts of Arizona who identify equally with Spanish and indigenous heritage.

Figure 18. A map of New Mexico and photos of local artifacts gathered in May of 2019.

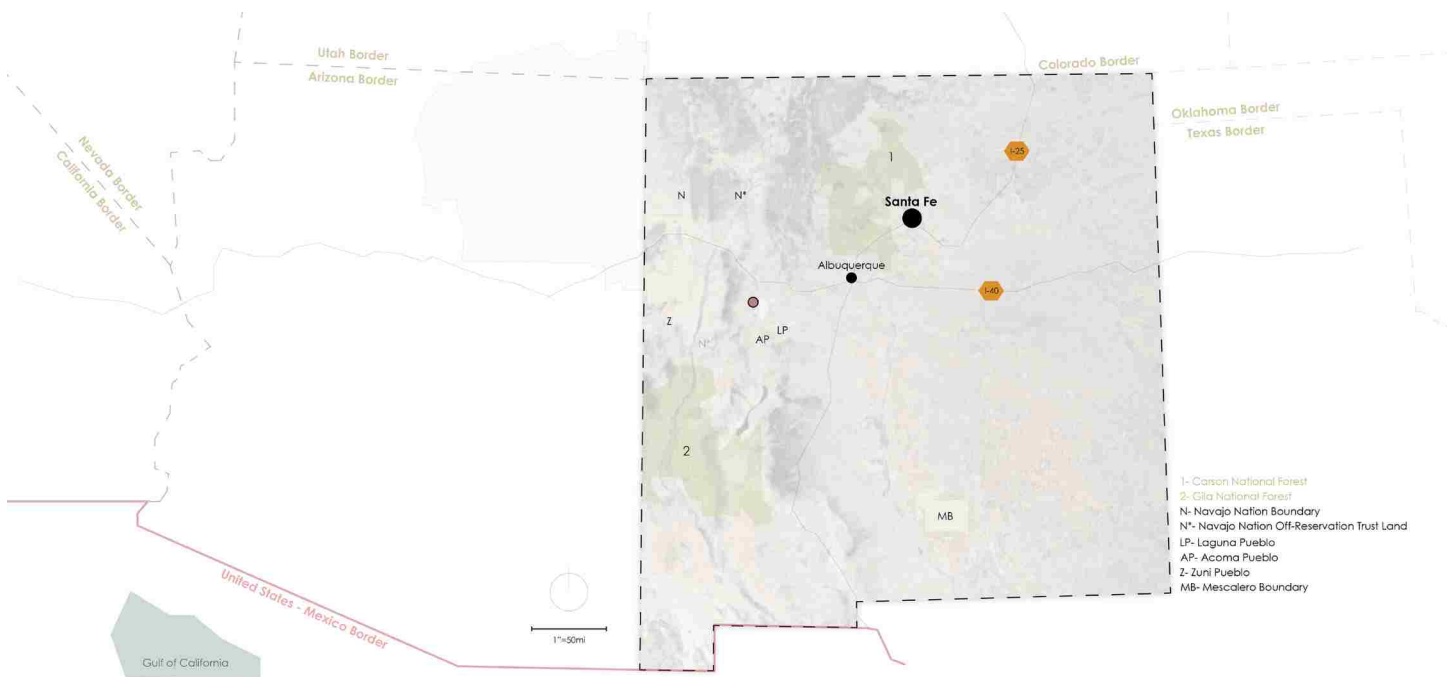




Figure 19. A photo taken by the author in New Mexico, May of 2019.

When gathering research, I attempted to contact every facility in New Mexico, hoping to find a facility that was female-only. After many unanswered phone calls, I reached a state-operated facility in Grants, New Mexico that fit my study criteria. Almost half of the population is female and/or below the poverty line, almost one-third of households are led by a single female, Over half of the businesses are owned by people of color, just under half are owned by women. The majority of women possess a high school diploma or GED, interestingly the same number of women have doctoral degrees as have no completed formal education.

Population: 26,746
Population per square mile: 6 persons
Below poverty line: 44%
Female persons: 49%
Median age of females: 37.7
Non-English household languages: 42.2%

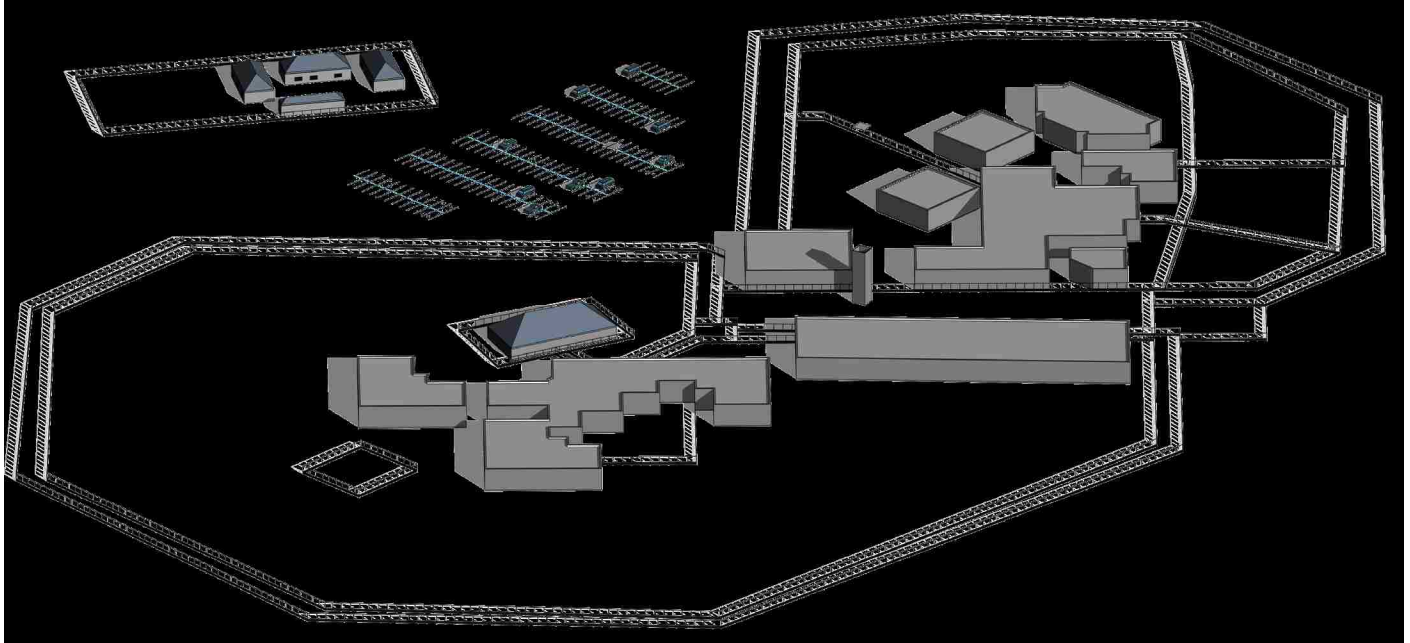
Single During Pregnancy: 53%
Single Female Head of Household: 28%
Women owned businesses: 46%
Businesses owned by POC: 55%
High School diploma/GED: 24.8%

Climate Type: Desert/Xeric Shrubland

Women's education:

- No education completed: 1.3%
- Doctoral degree: 1.3%
- Professional degree: 1.4%
- Associate's degree: 9%
- Master's degree: 9.3%
- No high school education: 13%
- Bachelor's degree: 15.8%
- Some college, no degree: 24%
- High School diploma/GED: 24.8%

Study Site: New Mexico Correctional Facility



Location: Grants, New Mexico, USA
Status: Operational, state-run
Residents: Female
Population: 380
Capacity: 440

Custody Levels:

- 3 (Medium)
- 4 (High)
- 6 (Supermax)



The facility originally served as the Reception and Diagnostic facility for the state, but later added a minimum unit and outside work detail and double-bunk beds.

If we assume that in the coming future, non-violent offenders will not be housed in long-term facilities and people will not be held outside of their home state, then the existing building can be renovated to meet more living needs of fewer residents.

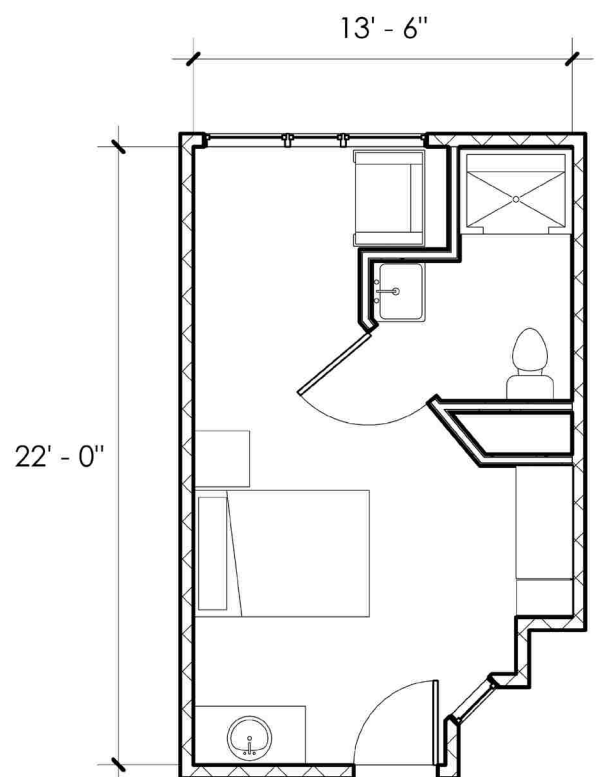
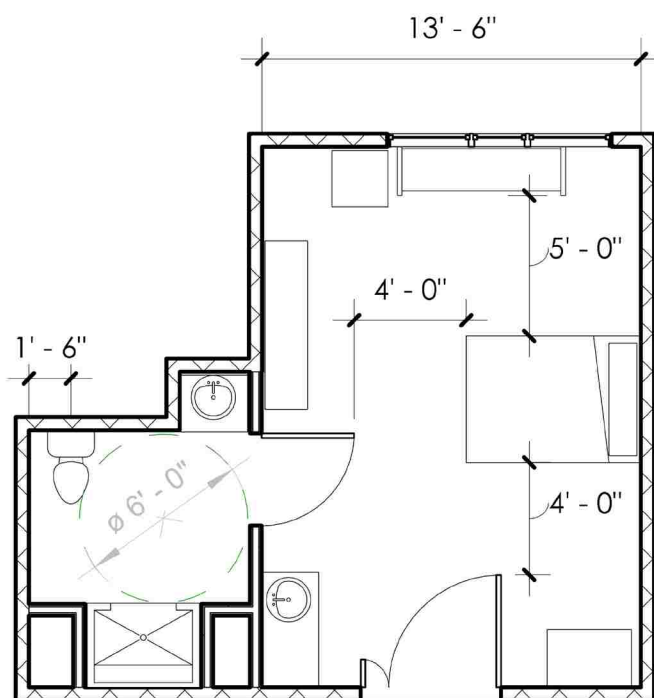
Sleeping rooms can expand in size, recreational and creative programs can diversify, staff break areas can be developed, visitation suites will be built to allow guests to spend quality time with their host, the outdoor program will contribute to a vast healing landscape.

Resident Sleeping Room- New Construction

- More privacy
- Normative
- Windows
- Helpful lines of sight
- Space for visitors
- Aging in place



Figure 20 Above: Rendering of new types of bedrooms, based on hospital “safe rooms”. Below: Plans of “safe rooms”.



Staff Wellness- Normative Decompression Areas

The spacial conditions of staff spaces are vital. As is common in other contemporary work places, interior kitchens and lounges should be welcoming, fun, and easy to maintain. There should be as many opportunities to relax outside as inside. Roughly half of all correctional staff go outside during their work breaks, and 76% desire a designated outdoor space in which to decompress, relax, and cope with stress. (Wagenfeld et al., 2017).



Figure 21 Above: Staff kitchen and breakroom. Below: Staff outdoor deck.



Home away from Home- Restorative Visitation Areas

Phenomena and materials punctuate bonding experiences to capitalize on their impact in creating and storing memory (Spear 1994). As travel distances can be prohibitive to visitation in rural areas, visitors will be given lodging for as long as they, the resident, and staff feel is beneficial. These should feel home-like, with outdoor spaces reminiscent of traditional ranches or backyards. (Toews, 2016)



Figure 22 Above: A porous interior visitation room provides privacy and connection. Below: Exterior visitation spaces reminiscent of local acequias, ranches, or backyards which allow visits to engage bioregion.



Supportive Community- Culturally Appropriate Behavioral Therapy

For successful healing and learning, treatment plans must be intuitive and specific to the people doing self work (Rubin 2018), with female healers bridging body and spirit (Lara 2008). Spaces should be indoor and outdoor, suitable for groups and/or individuals, provide prospect and refuge, soft fascination, grounding, and belonging.



Figure 23 Above: Group therapy in a kiva-inspired space. Below: Staff leading group therapy hikes while others explore alone.



Conclusion

I thought it best to end here. To carry a design further, even a theoretical design, necessitates connection and collaboration with the impacted bioregional residents. The original goal of this project was to develop a humane alternative to unjust spaces with phenomena and materials acting as architectural conduits to humanity and belonging, but what emerged was much more significant. A curious, critical audience was disturbed, angered, saddened, confused, and inspired to question the world around them. People were confronted with immensely complex issues but were reminded of their power to build justice. In the days following the presentation of this research, people reached out to me to share even more questions, connections, and dreams. Whatever direction I take individually is only meaningful because of these reactions.

Next Steps

There are a number of directions this work could grow in the future. It is vital to engage in greater study of boundaries to wellbeing for rural female populations; urban-plan scale intervention (i.e. distributed, culturally appropriate services) are desperately needed in rural communities; Life Cycle Assessments and/or Health Impact Assessments of rural carceral settings could be prepared and published to find opportunities for improved health outcomes for bioregions; a restorative framework could be applied to pathway facilities (i.e. schools, hospitals, community centers, places of worship) to reduce harm.

The direction I find most productive, the revolution that will make all others more attainable is for a public understanding that we are all prisoners in fear-based society. Bo Lozoff, interfaith humanitarian and co-founder of the Prison-Ashram Project wrote in *We're All Doing Time*, that “a lot of ordinary people who write me letters like: ‘although I’m not in a physical prison, I fell locked in by my fears, anxieties, desires, and anger. My life is getting so closed in, I don’t know what to do. Please, help me escape from the prison of my own making.’” Throughout this research process, I thought about my own imprisoning thoughts and invited my peers to share their prisons. I thought about the fixation on durability, anonymity, and prohibition of expression in correctional spaces. Normative design would allow walls to be carved into and written upon. Together we created a palimpsest from layers of fears, anxieties, desires, and anger (fig. 24). More layers could be added, of forgiveness, acceptance, motivation, song lyrics, doodles, tic-tack-toe. What would it mean for everyone to have such a place of belonging through catharsis, community through dissent? If we acknowledged and shared our prisons so as to be freed of them and help others free themselves, we would be collectively building freedom and justice. I invite the readers of this text to deface the next page and contribute to our Just Space.

Bibliography

- “ADPSR.” ADPSR, Architects/Designers/Planners for Social Responsibility, www.adpsr.org/.
- “Adverse Childhood Experiences Journal Articles by Topic Area |Violence Prevention|Injury Center|CDC.” Centers for Disease Control and Prevention, Centers for Disease Control and Prevention, www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/journal.html.
- “Gender Responsive Strategies.” National Institute of Corrections, nicic.gov/special-page-type/gender-responsive-strategies.
- “New Mexico Corrections Department.” New Mexico Corrections Department, cd.nm.gov/
- “New Mexico Demographics Data.” New Mexico Demographics Data, www.towncharts.com/New-Mexico/New-Mexico-state-Demographics-data.html.
- “Search for Superfund Sites Where You Live.” EPA, Environmental Protection Agency, 13 Sept. 2018, www.epa.gov/superfund/search-superfund-sites-where-you-live.
- Designing Justice + Designing Spaces Toolkit. Designing Justice + Designing Spaces, 2015.
- Prisons. New York, N.Y.]: Clog, 2014. Print. CLOG.
- Alexander, Michelle. The New Jim Crow: Mass Incarceration in the Age of Colorblindness, The New Press: New York, 2010, p. 21
- Berg, Peter, and Raymond Dasmann. “Reinhabiting California.” In *The Biosphere and the Bioregion*, pp. 65-70. Routledge, 2014.
- Berman, Judy. “Systemic Criminal Justice Planning: Improving Responses to Women Offenders in Hamilton County, Ohio.” National Institute of Corrections- Gender Responsive Strategies, The U.S Department of Justice, Dec. 2005, s3.amazonaws.com/static.nicic.gov/Library/020872.pdf.
- Boetel, Ryan. “New Mexico’s Female Prison Population Increasing.” *Albuquerque Journal*, 17 May 2018, www.abqjournal.com/1173443/nms-female-prison-population-increasing.html
- Chin, Gabriel J. “Race, the war on drugs, and the collateral consequences of criminal conviction.” *J. Gender Race & Just.* 6 (2002): 253.
- Council, Cascadia Region Green Building. “Living Building Challenge.” Online at: <http://www.cascadiagbc.org/lbc> (2008).
- Davis, Angela Y. *Are prisons obsolete?*. Seven Stories Press, 2011.

- Davis, Antionette, et al. "No Place for Youth: Girls in the Adult Justice System." Gender Responsive Strategies, The U.S Department of Justice- National Institute of Corrections, July 2016, s3.amazonaws.com/static.nicic.gov/Library/032648.pdf.
- Enders, Sheila R., Debora A. Paterniti, and Frederick J. Meyers. "An approach to develop effective health care decision making for women in prison." *Journal of Palliative Medicine* 8, no. 2 (2005): 432-439.
- Farr, Kathryn Ann. "Classification for female inmates: Moving forward." *Crime & Delinquency* 46.1 (2000): 3-17.
- Ferdik, Frank Valentino, et al. Correctional officer safety and wellness literature synthesis. Diss. Department of Criminology and Criminal Justice, University of South Carolina, Columbia, 2010.
- Forty, Adrian. *Concrete and culture: a material history*. Reaktion Books, 2013.
- Foucault, Michel. *Discipline and punish: The birth of the prison*. Vintage, 2012.
- Gilmore, Ruth Wilson. *Golded Gulag: Prisons, Surplus, Crisis, and Opposition in Globalizing California*, Second Edition. University of California Press, 2018.
- Guinn AS, Ports KA, Ford DC, Breiding MJ, & Merrick MT. (2018). Associations between Adverse Childhood Experiences and Acquired Brain Injury, Including Traumatic Brain Injuries, among Adults: 2014 BRFSS North Carolina. *External Injury Prevention*, 0, 1-7.
- Inda, Jonathan Xavier. "The value of immigrant life." *Women and migration in the US-Mexico borderlands*. Duke University Press, 2007. 134-157.
- Johnston, Norman Bruce. *Forms of Constraint : A History of Prison Architecture*. Urbana ; Chicago: U of Illinois, 2000. Print.
- Kaeble, Danielle, and Mary Cowhig. "Correctional populations in the United States, 2016." (2016).
- Kang-Brown, Jacob, and Ram Subramanian. "Out of Sight: The Growth of Jails in Rural America." Vera Institute of Justice, Vera Institute of Justice, June 2017, www.vera.org/publications/out-of-sight-growth-of-jails-rural-america.
- Kellert, S.R. and E.O. Wilson. (Eds.) (1995). *The Biophilia Hypothesis*. Washington, D.C.: Island Press.
- Kushner, Rachel. *The Mars Room: a Novel*. Scribner, an Imprint of Simon & Schuster, 2019.
- Lara, Irene. "Latina health activist-healers bridging body and spirit." *Women & Therapy* 31.1 (2008): 21-40.
- Larkin H, Shields JJ, Anda RF. The health and social consequences of adverse childhood experiences (ACE) across the lifespan: an introduction to prevention and intervention in the community. *External. J Prev Interv Community*. 2012;40(4):263-70.

- Lindemuth, Amy L. "Designing therapeutic environments for inmates and prison staff in the United States: Precedents and contemporary applications." *Journal of Mediterranean Ecology* 8.1 (2007): 87-97.
- Luibheid, Eithne. "' Looking like a Lesbian": The Organization of Sexual Monitoring at the United States-Mexican Border." *Journal of the History of Sexuality* 8.3 (1998): 477-506.
- Lozoff, Bo. *We're All Doing Time: A Guide for Getting Free*. Human Kindness Foundation, 1985
- Lynch, Shannon M., Dana D. DeHart, Joanne Belknap, and Bonnie L. Green. "Women's pathways to jail: Examining mental health, trauma, and substance use." *NCJ 241045* (2013).
- Malnar, Joy Monice., and Vodvarka, Frank. *New Architecture on Indigenous Lands*. Minneapolis: U of Minnesota, 2013. Print.
- Melton, Ada Pecos. "Indigenous justice systems and tribal society." *Judicature* 79 (1995): 126.
- Ney, Becki, and Teri K Martin. "Using Jail Exit Surveys to Improve Community Responses to Women Offenders." *National Institute of Corrections- Gender Responsive Strategies, The U.S Department of Justice*, Dec. 2005, s3.amazonaws.com/static.nicic.gov/Library/020853.pdf.
- Noddings, Nel. *Caring: A relational approach to ethics and moral education*. Univ of California Press, 2013.
- Pallasmaa, Juhani. *The eyes of the skin: Architecture and the senses*. John Wiley & Sons, 2012.
- Parker, Karen F., and Amy Reckdenwald. "Women and crime in context: Examining the linkages between patriarchy and female offending across space." *Feminist Criminology* 3.1 (2008): 5-24.
- Ports KA, Ford D, Merrick MT. Adverse childhood experiences and adult sexual victimization External. *Child Abuse and Neglect*. 2016;51, 313-322.
- Rennison, Callie Marie, Walter S. DeKeseredy, and Molly Dragiewicz. "Urban, suburban, and rural variations in separation/divorce rape/sexual assault: Results from the National Crime Victimization Survey." *Feminist Criminology* 7.4 (2012): 282-297.
- Richards, Shamelle, and Devon G. Peña. "An Environmental Justice Critique of Carceral Anti-ecology." *Addressing Environmental and Food Justice toward Dismantling the School-to-Prison Pipeline*. Palgrave Macmillan, New York, 2017. 115-136.
- Richardson, Jeff, and Linda Rosenberg. "Recommendations for Trauma-Informed Design." *Trauma-Informed Care*, National Council for Behavioral Health, www.nationalcouncildocs.net/wp-content/uploads/2018/10/Trauma-Informed-Design-Summary.pdf.
- Rubin, Daniel I., and Christopher J. Kazanjian. "Finding Place in Displacement: Latinx Youth and Schooling Along the Borderlands." *Journal of Critical Thought and Praxis* 7.1 (2018): 3.

- Sommer, Robert. *Tight Spaces : Hard Architecture and How to Humanize It*. Spectrum Book. Englewood Cliffs, N.J.: Prentice-Hall, 1974.
- Spear, Norman E., and David C. Riccio. *Memory: Phenomena and principles*. Allyn & Bacon, 1994.
- Sprott, Jane B., and Anthony N. Doob. "Fear, victimization, and attitudes to sentencing, the courts, and the police." *Canadian J. Criminology* 39 (1997): 275.
- Steffensmeier, Darrell J., and Charlene Jordan. "Changing patterns of female crime in rural America, 1962-75." *Rural Sociology* 43.1 (1978): 85.
- Swavola, Elizabeth, et al. "Overlooked: Women and Jails in an Era of Reform." Vera Institute of Justice, Vera Institute of Justice, Aug. 2016, www.vera.org/publications/out-of-sight-growth-of-jails-rural-america.
- Switzer, Adrian. "The Violence of the Supermax: Toward a Phenomenological Aesthetics of Prison Space." *Death and Other Penalties: Philosophy in a Time of Mass Incarceration* (2015): 230.
- Thiis-Evensen, Thomas, Ruth Waaler, and Scott Campbell. *Archetypes in architecture*. Oslo: Norwegian University Press, 1987
- Toews, Barb. "Designing with values and well-being in mind." *Routledge International Handbook of Restorative Justice* (2018¹).
- Toews, Barb. *The Little Book of Restorative Justice for People in Prison : Rebuilding the Web of Relationships*. Good Books, 2006.
- Toews, Barb. "This backyard is my serenity place: learning from incarcerated women about the architecture and design of restorative justice." *Restorative Justice* 4.2 (2016): 214-236.
- Toews, Barb, Amy Wagenfeld, and Julie Stevens. "Impact of a nature-based intervention on incarcerated women." *International journal of prisoner health* 14.4 (2018²): 232-243.
- Vicenti, Carey N. "The Reemergence of Tribal Society and Traditional Justice Systems.(Indian Tribal Courts and Justice: A Symposium)." *Judicature*, vol. 79, no. 3, 1995, pp. 134–141.
- Wagenfeld, Amy, et al. "Addressing correctional staff stress through interaction with nature: A new role for occupational therapy." *Occupational Therapy in Mental Health* 34.3 (2018): 285-304.
- Yang, Frances, and Sara Tepfer. *Prescription for Healthier Building Materials: A Design and Implementation Protocol*. ARUP, Spring 2018
- Zehr, Howard. *Changing Lenses : a New Focus for Crime and Justice*. Herald Press, 1990.
- Zehr, Howard. *The Little Book of Restorative Justice*. Revised and updated. ed., Good Books, 2015.

Appendix A: Glossary and Terms to Know

This glossary is meant to grow with the widening scope, and deeper investigation into components of and threats to justice. It is a compilation of terms from the Clog book *Prisons*, the ACLU, the Sentencing Project, the Compass Housing Alliance, the U.S. Federal Bureau of Prisons, U.S. Bureau of Justice Statistics.

Types of Facilities

Jail: Locally-operated short-term facilities run by sheriffs and/or local governments and designed to hold individuals awaiting trial or serving sentences of less than one year.

Prison: A facility operated by state governments and the Federal Bureau of Prisons (BOP) or private companies, designed to hold convicted individuals who will be confined for more than one year; also known as a correctional center or penitentiary.

Contract Prison/Detention: A secure institution built and operated by a private corporation. Private prisons house a wide range of detainees under contracts with public agencies including federal civilly detained immigrants, state prisoners, federal prisoners, members of the military, and other. A sovereign executes their right to exception by allowing the arrest and detention of individuals or groups deemed threatening to national security, without charge or trial. Although this practice intensified post 9-11, it has been used throughout time to control ethnic and religious groups. There are no regulations or enforceable standards regarding detention conditions, including medical treatment, mental health care, religious services, transfers, and access to telephones, free legal services, and library materials. The vast majority of detainees never receive legal representation. Examples include: Guantanamo Bay and the Northwest Detention Center

Emergency Shelter: overnight shelters provide a safe place to sleep each night

Transitional Housing: After release, to assist re-entry. A supportive environment with an emphasis on stabilizing income and addressing issues of substance abuse, mental health, and other barriers to housing.

RRCs (Residential Re-entry Centers) or Halfway House: Some halfway houses are designated to house those recently released from an institution, especially those who may have been through a substance treatment program. This type of halfway house is often sponsored by the state to reduce recidivism. Other houses are designed for anyone with addictions who need additional support.

Sober House: Following treatment, sober houses create living spaces that support independence from substances. Unlike halfway houses, it is not required to be enrolled in a treatment plan to live in a sober house.

Sober houses also do not limit the length of residence.

Types of Offenses

Violent Offense: Under this definition, violent crimes include murder and attempted murder; manslaughter; sexual assault and other sexual abuse crimes; assault; battery; robbery (defined as theft through the use of force); kidnapping; false imprisonment; carjacking; and other crimes against persons. As defined in this report, violent crimes also include some weapons offenses, such as unlawful discharge of a weapon and unlawful throwing, placing, or discharging of a destructive device or bomb. In addition, the ACLU has excluded all sex crimes from the data on LWOP for nonviolent offenses, including sex crimes—such as possession of child pornography—that do not inherently involve an act of violence against another but in which the sexual nature of these offenses inflicts a kind of harm grave enough to set them apart from other nonviolent offenses.

Non-violent offenses: The ACLU classifies crimes as nonviolent if they do not involve the use or threat of physical force against a person. Under the definition used throughout this report, nonviolent crimes include property crimes such as larceny, vehicle theft, burglary, possession or receipt of stolen property or goods, shoplifting, trespass, embezzlement, criminal mischief, criminal damage, issuing a bad check, tax crimes, identity theft, fraud, forgery, criminal impersonation, money laundering, stolen vehicle offenses, and illegal use, theft, or unlawful reproduction of a credit card. Nonviolent crimes also include drug offenses such as possession with intent to distribute, manufacture, sale, and trafficking of controlled substances; financial crimes such as bribery, extortion, and racketeering; and public-order offenses such as violation of probation or parole, obstruction of criminal justice processes, illegal gambling, driving while intoxicated, disorderly conduct, prostitution, public indecency, carrying a firearm without a permit, illegal sale of a firearm, and criminal possession of weapons. A large, unknown number of individuals serving life sentences without parole are non-violent offenders.

Types of Sentences

Life Without Parole/ “Death-in-prison”: These are sentences given in a term of years—for instance, 100 years—that, in practice, amount to de facto life-without-parole sentences. Similarly, sentences that run consecutively can add up to prison sentences that exceed an offender’s natural lifespan thus ensuring that the prisoner will die in prison before reaching his or her date of parole eligibility or release. The politicization of parole decisions has made review boards and governors extremely reluctant to grant parole, making it increasingly difficult for prisoners serving life sentences to be released on parole, even for prisoners who can demonstrate their rehabilitation and fitness for release. Many states and the federal government have abolished parole release discretion, which has effectively converted many life sentences into life without parole (ACLU).

Convicts: a person found guilty of a criminal offense and sentenced to imprisonment.

Probation: County-level supervision after release from a local jail sentence usually under one year, or in place of a jail sentence. Probation often involves regular reporting to an officer, substance use testing, and requirements to stay away from certain individuals or locations.

Parole: State-level supervision after release from state prison and involves similar requirements to probation.

Lockdown: Period of time in which prisoners are held for almost twenty-four hours a day within their cells in response to security threats or investigations inside prisons; can last more than one year.

Sensory deprivation: Process by which someone is deprived of human interaction and normal external stimuli such as sight and sound for an extended period of time; used in prisons as a form of punishment in Supermax units.

Types of Justice

Distributive Justice: John Rawls. Society should be structured so that the greatest possible amount of liberty is given to its members, limited only by the notion that the liberty of any one member shall not infringe upon that of any other member. Secondly, inequalities—either social or economic—are only to be allowed if the worst off will be better off than they might be under an equal distribution. Finally, if there is such a beneficial inequality, this inequality should not make it harder for those without resources to occupy positions of power – for instance, public office.

Environmental Justice: Within an environmental rather than explicitly social frame of reference, a range of interrelated dimensions and conceptions of justice related to humans and nonhumans, individuals and collectivities, on a case by-case basis.

Punitive/Retributive Justice: Belief that offender deserves to be punished, proportionally to offense. Prevention of future crimes (deterrence) or rehabilitation of the offender are not considered in determining such punishments.

Restorative Justice: As opposed to putative justice, focuses on rehabilitation of offenders through reconciliation.

Garrison State: Harold Lasswell's 1941 work "The Garrison State" argues that the modern garrison state would appear on the surface to be democracy, while the internal power structure is increasingly concentrated in an elite class of military officers and militarized civilians. In this system, industrial societies are increasingly dominated by an elite class of specialists in modern violence, administered through management, technical operations, and public relations. Since modern warfare is not limited to an exchange of ballistics, total national defense requires a discreet and complex war machine, in which all members of the nation must perform their assigned operation.

In this system, the entire population is susceptible to terror but can also be a terrorist. National security is maintained through domestic morale and normalizes institutionalized deception and coercion as necessary mechanisms for internal control. In order to maintain popular compliance, the garrison state will depend on threats of war, rather than actual war. Lasswell states that the increasing phenomena of social fragmentation and dissociation from the nation state. He goes on to predict that if movements devoted to peace or progress develop enough of a following, the state would apply correlating increased controls on 'subversive activities'. An increasingly affluent, self-centered society will demand a militant defense against internal and external 'others'. As such, the rise of countermores, i.e. Black Lives Matter, MeToo, Dreamers, will lead to increased demand for the restoration of traditional mores and increased coercion of conformity to those norms. This dynamic will be supported by the ever-present expectation of violence. The susceptibility of contemporary centralized systems to terrorism and sabotage will validate constant vigilance of internal as well as external threats.

Wellness Considerations

Gender: A completely personal and subjective component of embodied identity. To be "cis-gendered" means that one feel that their birth gender and their expressed gender are aligned. To be "trans-gendered" is to experience incongruity between assigned sex and expressed gender; trans people will occasionally utilize medication or surgery to achieve congruence. To be "non-binary gendered" is to exist beyond boundaries of "cisnormative" binaries of masculine/feminine. To be "intersex" is to have genitalia or other physical sex characteristics that do not conform to rigid definitions of male or female. It is increasingly common to respectfully discuss preferred gender pronouns so as not to retraumatize or deeply offend colleagues; e.g she/her, he/him, they/them. Gender is independent of sexual orientation. As gender is a significant factor of lived experience, it is important for designers to respect it as they would any other component of embodied identity; e.g. age, ethnicity, physical operation, mental operation.

Re-entry: Returning to community after jail, detention, or prison

Recidivism: A person's relapse into a previous condition or behavior; especially criminal behavior

Green Behaviorism: Study of relationship between toxins and criminal behavior. Chemical exposure contributes to likelihood of offending. (From "Green Criminology")

Officer wellness: Health and safety measures for criminal justice professionals that consider physical and mental wellbeing

Compassion fatigue: Common to medical and justice professionals, physical and mental stress resulting from

helping or wanting to help

Programmatic Elements

Cell: Typical residential unit within a prison; designed to contain not more than two individuals.

Cell Block: Multi-level cell arrangements built within a hollow building and not touching exterior walls.

Pod: Small groups of cells typically found in supermax prisons.

Dormitory: Room or areas used to confine three or more inmates.

Dayroom: Room in which inmates are confined during the day; in the dayroom, inmates may read, write, and carry on other activities.

Death row: The unit within a prison that houses incarcerated persons who have been sentenced to death and are awaiting execution.

Sally Port: Secure, controlled entryway in a prison consisting of two doors that are opened one at a time, separated by a small vestibule that is designed to prevent prisoners from escaping during transfer procedure.

An officer behind protective glass adjacent to the vestibule opens the port doors individually after verifying that the person is allowed to pass. In “supermax” controlled facilities, groups of cells may be connected to central corridors via sally ports.

Appendix B: Restorative Justice Design Tools

After meeting clients, ask them if they'd feel comfortable participating in a survey at the beginning and end of the design process. The survey can be adapted for staff. (Adapted from Toews 2016)

Please respond to the following questions by circling a number from 1-5.

1 means "I strongly agree", 5 means "I strongly disagree"

Overall, I have positive feelings about my home community. 1 - 2 - 3 - 4 - 5

I have a space of my own in my home community. 1 - 2 - 3 - 4 - 5

I feel safe in this facility. 1 - 2 - 3 - 4 - 5

I feel positive connection to this facility. 1 - 2 - 3 - 4 - 5

I keep my cell tidy. 1 - 2 - 3 - 4 - 5

I would like to receive visitors in this facility. 1 - 2 - 3 - 4 - 5

I value social spaces. 1 - 2 - 3 - 4 - 5

I value private spaces. 1 - 2 - 3 - 4 - 5

I access private spaces more than social spaces. 1 - 2 - 3 - 4 - 5

I feel connected to nature in this facility. 1 - 2 - 3 - 4 - 5

If time and comfort allow, an interview is preferred given its open-ended nature. As with the survey, the interview can be adapted for staff. (Adapted from Toews 2016)

Imagine I am new to this facility. Give me a brief orientation and tell me how I can create some time and space for myself here.

Finish statement: "There are spaces in this facility that I can... [pursue meaningful occupation, hobbies, be alone, connect, etc.]"

One of the following:

a. If you could design the ideal space in which to [express excitement, anger, frustration, etc.], what would it look like? Give me a tour of your scene.

...or...

b. Describe a scene that shows your dream form of privacy.

Appendix B: Restorative Justice Design Tools

Questions to guide a restorative justice design process: (Toews, 2018)

Design creation

1. Who will be the users of the space - victims, offenders, support people, community members, justice professionals, others?
2. What are each of their justice needs and/or obligations?
3. What do these needs/obligations suggest about the goals to be achieved in the space?
4. What do the goals suggest about the design needed to achieve them?

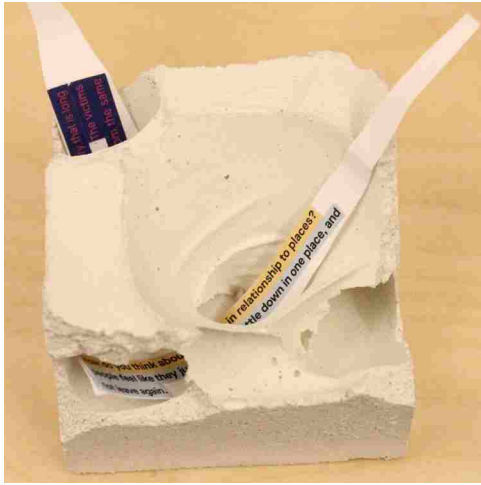
Post-occupancy evaluation

1. How do each of the user groups perceive and experience the space, both inside and outside?
2. In what ways does the spatial design facilitate the achievement of the identified goals? What barriers exist?
3. What design modifications can be made to improve users' experiences and facilitate the achievement of identified goals?

Appendix C: Design Process

Concept Models

Concept models exploring spacial expressions of captivity. The models were made in no particular order with little deliberation, the phrases were collected from media sources spanning almost two years- pairing the models with the text was done in a frenzy.



Text reads

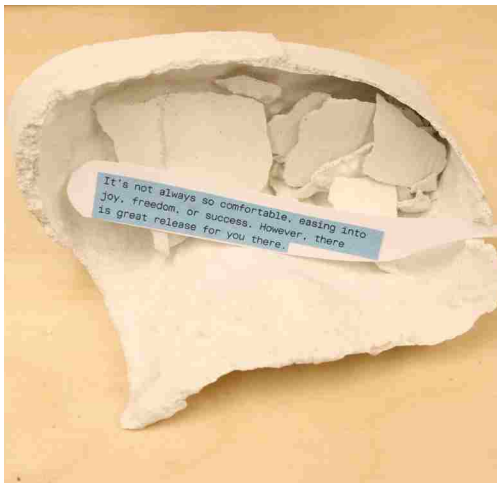
"How do you think about identity in relationship to places? people feel like they just want to settle down in one place, and not leave again."

"a conversation in our country that is long overdue. The Victims of crime usually come from the same communities."



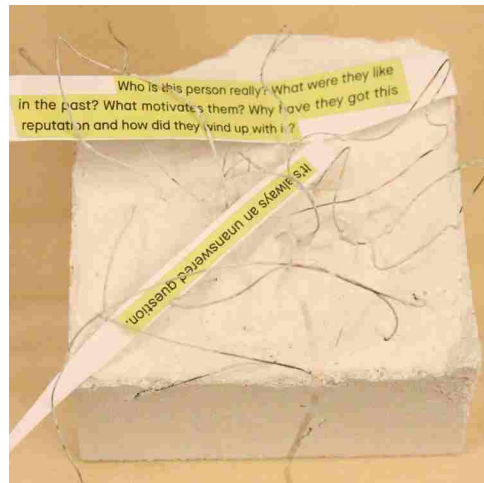
Text reads

"How much of your life and this transition have you felt was in your control?"



Text reads

"It's not always so comfortable, easing into joy, freedom, or success. However, there is great release for you there."



Text reads

"Who is this person really? What were they like in the past? What motivates them? Why have they got this reputation and how did they wind up with it?"
"It's always an unanswered question."

Creative artifacts



A card game could help design teams in creative brainstorming sessions. Distilling new concepts down to fun images may give clarity.



Rather than *visiting a site*, reinhabit a bioregion. Crafts and medical herbs connect phenomena, materiality and lived experience. Phenomena and materials take shape in the creative process with multisensory creative expression. To reinhabit the place of design, we may dry herbs and make drink tea from wild plants, create crafts from local resources, and connect with local artisans.

Design Matrices

By creating matrixes to organize and characterize design features and strategies, designers are able to graphically unpack theoretical framework, phenomena, and materials. Similar matrices can be made for other design drivers. This can be done individually or in groups, as a starting point or a benchmark.

| | Home-like | Trust | Meaningful work | Social Connection | Wayfinding | Responsibility | Independence | Understanding/Acceptance |
|--------------------------|-----------|-------|-----------------|-------------------|------------|----------------|--------------|--------------------------|
| Restorative Design | | | x | x | x | x | x | x |
| Salutogenic Design | x | | | | | | | |
| Trauma Informed Design | | x | | x | | | | |
| Normative Design | x | | | | | | | |
| Gender Responsive Design | x | x | | x | | | x | x |
| Universal Design | | | | x | x | | x | x |
| Therapeutic Gardening | | | x | | | x | | |
| Design for Aging | x | x | | x | x | | x | |
| High Performance Design | | | | | | x | x | |
| Regionalism | x | | | x | x | x | | |
| Pueblo Design | x | | | x | | x | | |
| Environmental Justice | | | | | | x | | |

| | Calm | Warmth | Coolth | Echo | Disorientation | Wayfinding | Expand | Contract | Transparent |
|----------------------|------|--------|--------|------|----------------|------------|--------|----------|-------------|
| Smell | | | | | | | | | |
| Wind | | | | | | | | | |
| Light | | | | | | | | | |
| Shade | | | | | | | | | |
| Sound | | | | | | | | | |
| Silence | | | | | | | | | |
| Bird Song | | | | | | | | | |
| Foot steps | | | | | | | | | |
| Water- Trickling | | | | | | | | | |
| Water- Steady Rain | | | | | | | | | |
| Voices- Conversation | | | | | | | | | |
| Voices- Argument | | | | | | | | | |
| Voices- Laughter | | | | | | | | | |
| Ringling Phones | | | | | | | | | |
| Physical Touch | | | | | | | | | |
| Presence of water | | | | | | | | | |
| Thermal variability | | | | | | | | | |
| Airflow variability | | | | | | | | | |
| Non-Rhythmic Stimuli | | | | | | | | | |
| Natural systems | | | | | | | | | |
| Complexity & Order | | | | | | | | | |
| Animal Howling | | | | | | | | | |
| Chirping Insects | | | | | | | | | |

| | Available w/in 300mi of site | Available w/in 600mi of site | Culturally Relevant | Human Health Risk | Environmental Health Risk | Reusable | Refuge | Soft | Hard | Choice |
|---------------|------------------------------|------------------------------|---------------------|-------------------|---------------------------|----------|--------|------|------|--------|
| Glass | | | | | | | | | | |
| Stone | | | | | | | | | | |
| Fired masonry | | | | | | | | | | |
| Cured masonry | | | | | | | | | | |
| Plastic | | | | | | | | | | |
| Metal | | | | | | | | | | |
| Earth | | | | | | | | | | |
| Water | | | | | | | | | | |
| Vegetation | | | | | | | | | | |
| Wood | | | | | | | | | | |
| Straw | | | | | | | | | | |
| Hide | | | | | | | | | | |
| Fur | | | | | | | | | | |

Program Inventory

After going through early design brainstorming, interviewing people who have lived in facilities dedicated to personal growth, and thinking about my own needs as a women, it proved helpful to create a program inventory. To determine square footages and adjacencies of each space, more information is needed (i.e. population size, buildable area, user needs). Programs may be added or eliminated as needed.

Welcome

- Entryway*
- Reception

Home

- Living Room
- Bedroom (Individual)*
- Suite (Shared) *

Resident Wellbeing (Self-care)

- Kitchen-Dining Room (Combined)
- Washrooms*
- Locker rooms
- Salon
- Spa

Resident Wellbeing (Caring with and from others)

- Physical/Mental:
 - Nursery (Infants)
 - Obstetric/Gynecological Clinic
 - Behavioral Therapy
 - Apothecary/botánicas
- Emotional:
 - Visitation Areas (Small and large groups, conjugal visits; interior and exterior) *
- Spiritual:
 - Voluntary Solitude (Interior and Exterior) *
 - Kivas
 - Sweat Lodge
 - Smudge Hut

Recreation

- Staff Break Areas (Interior and Exterior) *
- Backyard
- Workspace/Studio (Shared and Individual)

*Primary concern