Arresting the Cycle: Design for Porous Prisons

by

Viktorija Abolina

B.A., Architecture and Photography Bennington College, 2005

#### SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARCHITECTURE AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

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Mamu un Tēt,

Paldies par Jūsu mīlestību, atbalstu, padomu un ticību manām spējām! Šī grāmata ir veltīta Jums!

## Arresting the Cycle: Design for Porous Prisons

by

### Viktorija Abolina

Submitted to the Department of Architecture on January 15, 2009 in Partial Fulfillment of the Requirements for the Degree of Master of Architecture.

ABSTRACT

Incarcerating over two million prisoners a year costs the government an astounding twenty-six billion dollars annually, which means the government spends the same amount of money on each inmate as any American would make a year working a minimum wage job. Although cities "generate" the majority of offenders most U.S. prisons are located outside of cities. Every year more than six hundred thousand prisoners are released to return home, but almost fifty percent of the released return back to prison within three years.

This migration of offenders back and forth between the cities they live in and rural prisons rendersthese prisons to be a significant part of the urban gestalt. This migration of people from their home communities to rural prisons renders prisons and people they house to be culturally and economically an integral part of urban community. Nevertheless, the money spent on prisons is housed outside of the communities.

This thesis does not claim to be a reformation to prison system but, rather, to prison architecture. Through the medium of architectural design, this thesis will attempt to instigate a dialogue questioning the following hypothesis:

Spatial and visual interaction with the outside world is necessary for the sustainable reformation of prison inmates. Economic revitalization of the areas with high rates of incarceration can subsequently reduce these rates. Merging these two propositions gives a rise to following key questions: "What are the architectural implications of a prison that is both secure to prevent escape and porous to allow for the infiltration of the community that surrounds it? And, what are the urban implications of an institution that, instead of benefiting corporations, gives back to the community in terms of space and resources?" I propose to test the limits of this proposal in an architectural and urban form dismantled over the fabric of New Orleans. This report will describe the background research conducted in order to define an architectural problem for a Master of Architecture thesis and the design solution that came out of this hypothesis.

Thesis Supervisor: Adèle Naudé Santos

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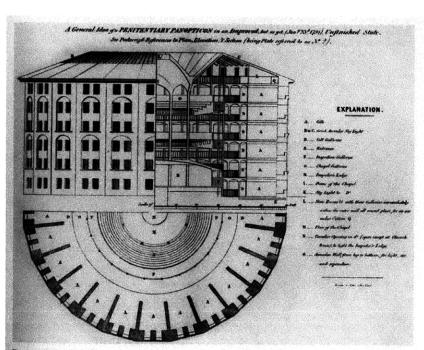
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## Introduction

In the late XVIII Century, philosopher Jeremy Bentham proposed the Panopticon prison – a radial structure preventing inmates from seeing or communicating with each other by placing their cells at the perimeter of the structure, all facing a central watchtower. Bentham argued that, due to optical distortion, a prisoner could not tell if they were observed by the guard or not and thus would always behave in the best possible manner.

The Panopticon, described by Foucault as "the diagram of a mechanism of power reduced to its ideal form" and "a particular institution, closed upon itself"<sup>1</sup> proposed an architecture that according to Bentham best served the purpose of a prison. Bentham uses two very architectural notions of view and light to describe the architectural idea behind the Panopticon, the core of this discussion is not in the reformation of the prisoner, but rather in creation of a space that would generate the environment for change.



Pigure 26. A 1791 version of Jeremy Bentham's Panopticon proposal. John Bowring, ed., Works of Jeremy Bentham (1843), vol. 4, op-208ite 172.

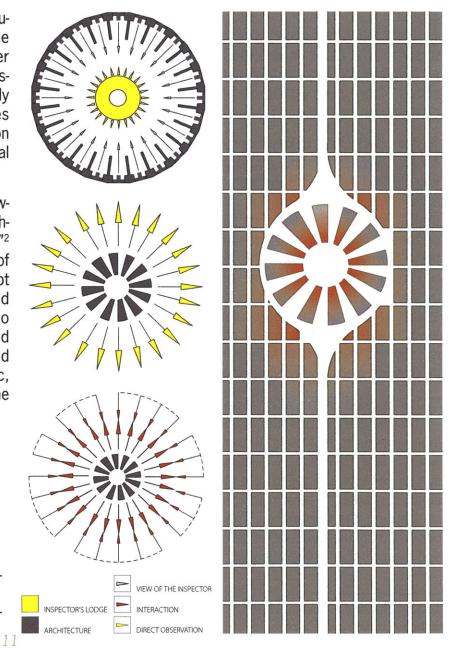
Jeremy Bentham from Panopticon or, The Inspection House (1791)

<sup>1</sup> Michel Foucault, Discipline and Punish The Birth of the Prison (New York: Vintage Books, 1995) pg. 201

Morals reformed – health preserved – industry invigorated – instruction diffused – public burthens lightened – Economy seated, as it were, upon a rock – the Gordian knot of the Poor-Laws not cut, but untied – all by a simple idea of Architecture!

Over a century later, Angela Y. Davis has put forth the argument that punishment in the form of imposed surveillance has a historical connection to the creation of a self-driven worker to fulfill the demands of the then newly emerging capitalist system. She contends that the current prison system is financially beneficial to a few large corporations - either contracting inmates as a labor source or receiving contracts to supply the population of over two million prisoners with food, clothing, and personal hygiene products.<sup>1</sup>

In her book, Are Prisons Obsolete?, Davis proposes the following: "What would it mean to imagine a system in which punishment is not allowed to become the source of corporate profit?"<sup>2</sup> This has led me to ask: "If we were to abandon the notion of prisoners working to produce a product and redirected their debt towards giving back to society, what spatial implications would this effectuate on the architecture housing this redirection?" If no physical goods are produced, only the good of services rendered to the community both within and neighboring the prison, would that not require the placement of prisons within the urban fabric, accessible to people who might want to take advantage of the programs offered at the prison?



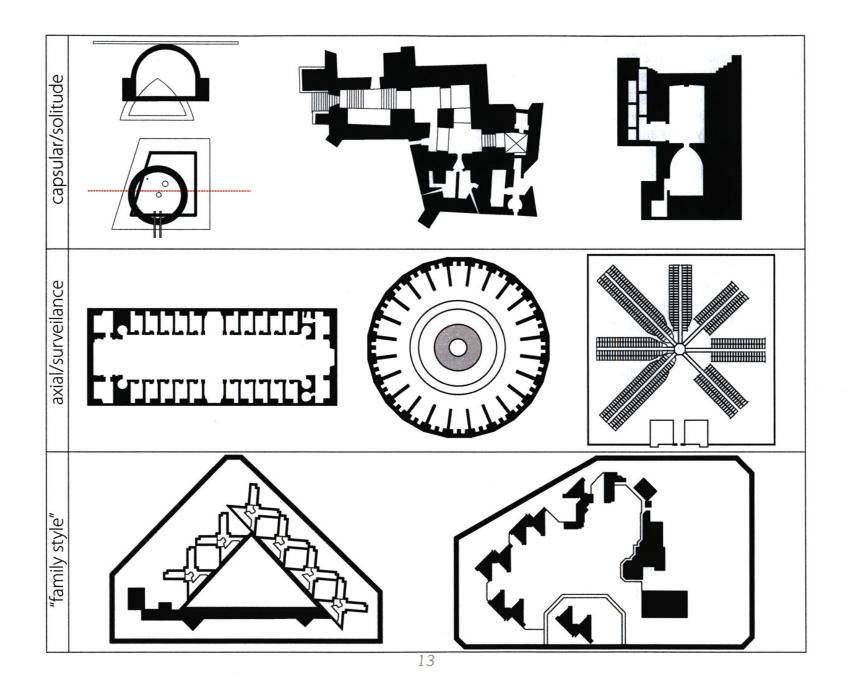
- 1 Angela Y. Davis, Are Prisons Obsolete? (New York: Seven Stories Press, 2003)
- 2 Angela Y. Davis, Are Prisons Obsolete? (New York: Seven Stories Press, 2003) pg.46

Prison history dates back to ancient Rome, where archeologists have found numerous structures that can be identified as public prisons. The most documented, Mamertine Prison, was constructed between the First and Second century B.C.E. The structure consisted of two cells put atop of one another, a typology that in XIIth century can be found in France at the Pierrefonds Château.

Many forms of makeshift prisons - such as underground cells in Mcastles, forts, and guard gates - existed from Xlth century in Europe and Asia. Prisons were usually small and were rarely used as a form of punishment but, rather, as a form of confinement until trial or execution. It is important to note that the conditions for prisoners were very poor mostly without daylight and proper ventilation. Norman Johnston in his book *Forms of Constraint, A History of Prison Architecture*, argues that "the idea that imprisonment was punitive and therefore might deter others from crime may have been assumed but was rarely articulated."<sup>1</sup> The discourse on reform of the prisoners was borrowed from the Church, which first introduced isolation as punishment for the monks. By the ninth century monastic prisons were commonplace across Europe.

This marked an era of what one may define as capsular incarceration, where the prisoner is unaware of the guard and is forced to look inwards to find the path to God and confess their sins. Hence, when in late XVIII century Bentham proposed the Panopticon, where surveillance was implied and the guard-prisoner relationship was clear, it marked a reform to prison architecture and the discourse on treating the prisoners. The Panopticon started a typology of prisons that I labeled axial, where the relationship between the guard and the prisoner is hieratical and clear.

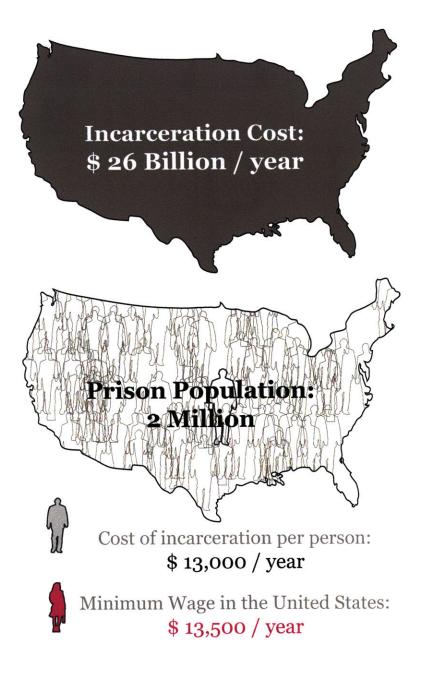
<sup>1</sup> Norman Johnston, Forms of Constraint, A History of Prison Architecture (Urbana and Chicago: University of Illinois Press, 2000) pg. 28



Today, the practice of isolating offenders from society is the most commonplace solution to the problem of crime. ince the 1970's, prison design has consisted of small community blocks of twenty to forty people per block, creating a deceptive notion of a family-like network among prisoners. However, the realities of racial groupings in prisons distort this system and, as Rem Koolhaas argues, such a prison formation looses the prisoner-guard honesty that was present in the Panopticon style prisons.<sup>1</sup> It therefore follows that, prisons today mark the third category of incarceration facilities that are neither capsular as were early prisons, nor axial as was Panopticon, but, rather, a space that neither instigates reformation, nor displays the honesty of the ones in power, and create an environment where people are seemingly allowed to build networks only to loose them once they leave and return to their neighborhood. This practice is often criticized by psychologists noting that extended periods in isolation tend to dull human response to everyday stimuli.<sup>2</sup>

Incarcerating over two million prisoners a year costs the government an astounding twenty-six billion dollars annually, which means the government spends the same amount of money on each inmate as any American would make a year working a minimum wage job. Therefore, the economics of incarceration is one of the driving themes for my thesis. It is heavily inspired by research done at the Spatial Information Design Lab (SIDL) at Columbia University, where their research focuses on mapping prisoners original locations in their home communities and their location and duration of stay after being released from prison. Their findings suggest that most people return to their homes after the imprisonment, but almost fifty percent of the released return back to prison within three years.

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<sup>1</sup> S,M,L,XL, Rotterdam : 010 Publishers ; New York, N.Y. : Monacelli Press, 1995, pg 241

<sup>2</sup> Asatar P. Bair, Prison Labor in the United States: An Economic Analysis (London and New York: Routledge, 2008) pg.2

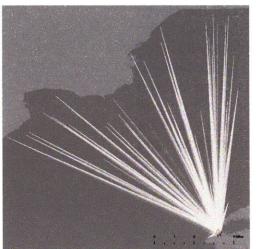
It is important to note that their research shows that elevated highways. industrial areas, public housing. SIDL visualized that physical isolation reinforces economic and racial isolation and the prison geographies intersect the geographies of poverty and race. Prisons and the people they house are culturally and economically integral part to their urban community. Nevertheless, the money spent on prisons is spent outside of the communities. The purpose of SIDL is to help public officials in finding ways to reduce prison populations and reinvest the money savings back into the neighborhoods that "generate" the most offenders. The maps depict places for new investments in education and public space through the reinforcement of non-profit organizations and community initiatives.

SIDL research focused on high reentry blocks, which they call million dollar blocks. A million dollar block is a city block wherein the State spends an excess of one million dollars a year to incarcerate residents of that block - an economy where over a million dollars is spent on the block but not in the block.

#### Redefining the Problem: Mass Migration and Reentry

600,000 people return from prison each year in the United States, and millions more come home from jails. About 240,000 of the released prisoners – roughly forty percent – will return to prison within three years. In and out, they come and go, all too often simply cycling back and forth between the same places. New maps can help us grasp this extraordinary

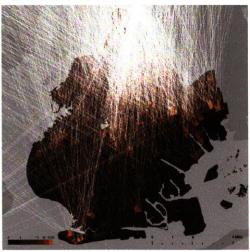
phenomenon: prison migration and with it highresettlement communities. When crime maps are replaced by incarceration maps, we can finally visualize the geography of a massive migration,



Prisoner migration patterns, Brooklyn to New York State, 2003.

the flow of people in and out of the city. We can aak whether this quiet but pervasive migration orisis isn't creating a growing class of noncitizens, concentrated in very few places in all of our major cities.

The new visualizations reveal what was previously difficult to see - the mass disappearance and reappearance of peop in the city. They focus on the systematic phenomenon of exprisonma' reentry and examinen evel instaluons that respond to this structural feature of urban life. What happens to these people when they come home? We often know where they are going and what will happen What is our responsibility to effectively resettle them, given all hat we know?



Prisoner migration patterns, Brooklyn, NY, 2003

Maps from Spatial Information Design Lab School of Architecture Planning and Preservation | Columbia University am proposing to investigate a new typology of prisons that manlifests itself in an architectural form dismantled over the urban fabric of New Orleans. I chose New Orleans because of its current condition of being in the process of rebuilding its community and the business districts. The prison as is proposed will allow for the rebuilding the community with the resources it offers. In addition, one of the "million dollar blocks" can be found in New Orleans the Central City area.

∧ fter hurricane Katrina hit New Orleans only 57% of population Areturned to Central City area. Central City constitutes 5.4% of New Orleans' population and 12.9% of its prison population. In 2006, it cost 1.2 million dollars to incarcerate people from the Central City area.<sup>1</sup> The area is physically isolated from the business district of New Orleans by a raised highway, the large millennium dome, and large swath of open land, the landscape that has been found to generate high incarceration rate blocks in other U.S. cities. After Katrina, only three out of the eleven schools reopened in the area, causing this particular block in the city to be at even higher risk of crime. Topographically this area is only 0.5 feet above sea level, and is in the area of floodwaters. The physical isolation of the Central City area, its close location to business district and the high levels of poverty and despair both before and after hurricane Katrina rendered this site to be one in great need for a detailed investigation of urban pattern and a proposal for change.

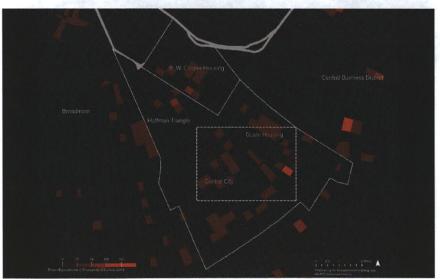
<sup>1</sup> Data taken from City Council of New Orleans Criminal Justice Committee Meeting, Spatial Information Design Lab, School of Architecture Planning and Preservation | Columbia University. Research Team: Laura Kurgan, Sarah Williams, David Reinfurt, Eric Cadora



Spatial Information Design Lab School of Architecture Planning and Preservation | Columbia University



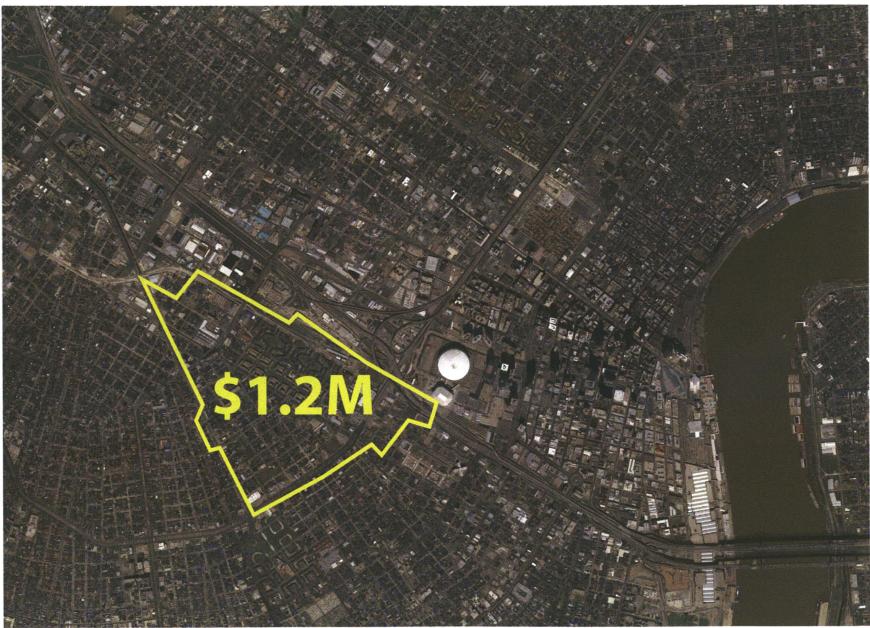
Prison Admission Density in 2006, New Orleans, LA | maps by SIDL



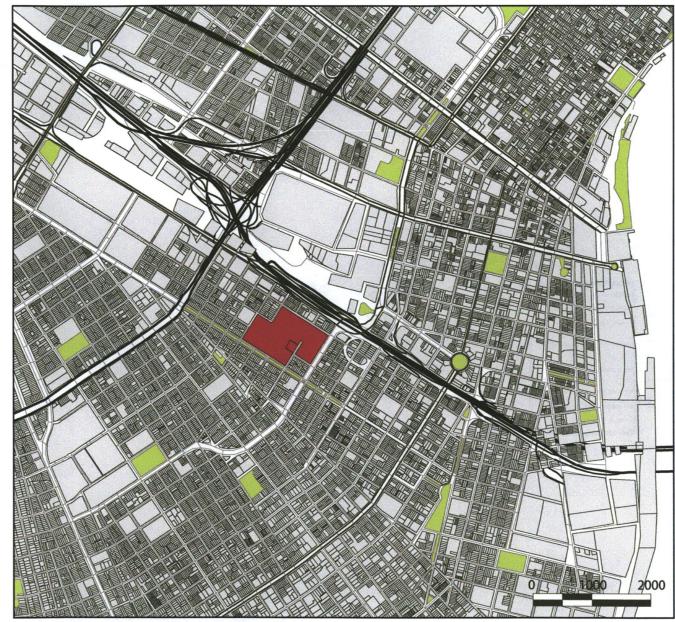
Prison Expenditures in Central City area, New Orleans, LA | maps by SIDL

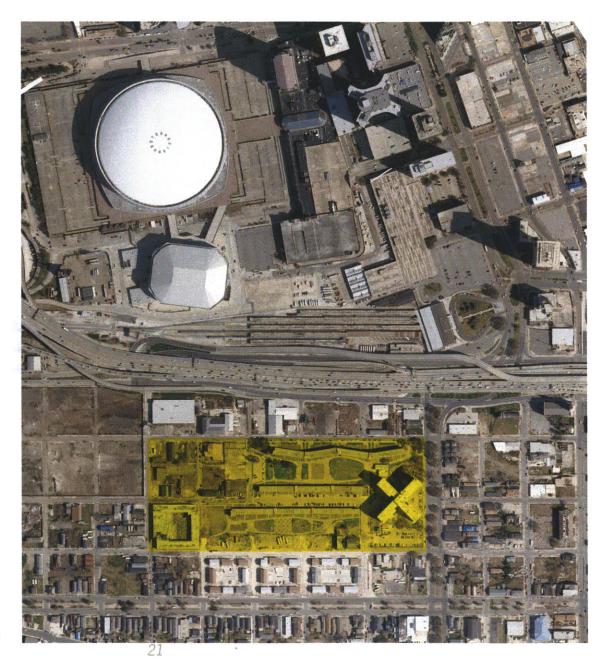
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NEW ORLEANS POPULATION: 484,674
INCARCERATED PEOPLE (2003) 1,432
\$\$\$ COST OF INCARCERATIONS (2003) \$42 MILLION
CENTRAL CITY POPULATION: 5.4 % OF NOLA
CENTRAL CITY PRISONER POPULATION: 12.9 % OF NOLA

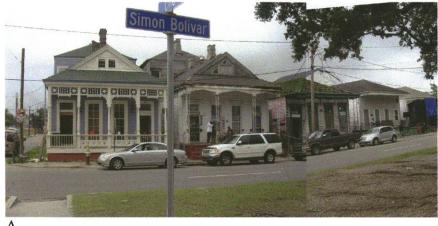


# Site Analysis





Google Earth Image





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Microsoft Virtual Earth snapshot



## Female Incarceration

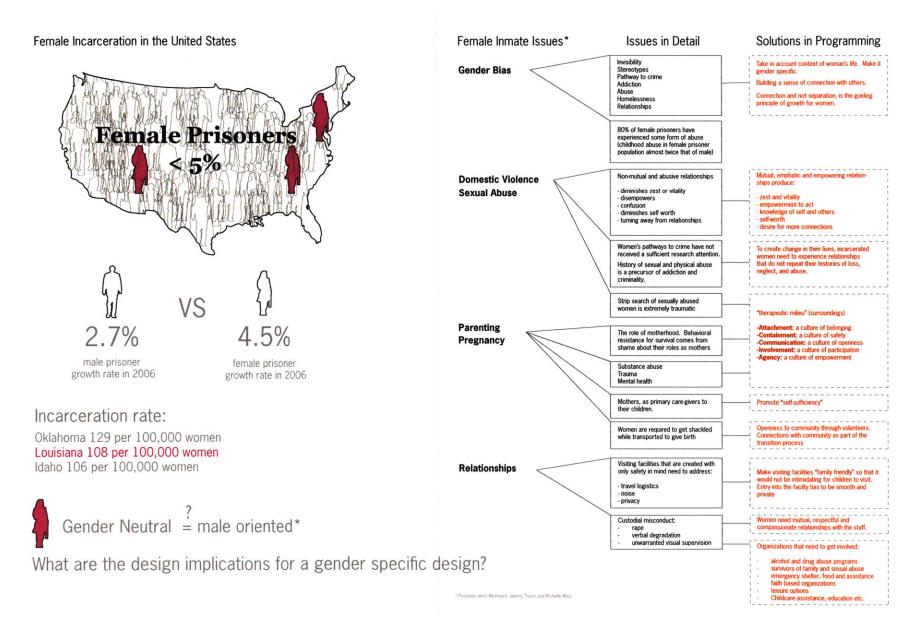
In the process of researching the American prison system, I became interested in the gender issues surrounding incarceration, along with the rising population of female offenders. In fact, the growth rate of female prisoners in 2006 was double that of male prisoners. Louisiana is second only to Oaklahoma for the incarceration of female offenders. In 2006, there were 108 female inmates per 100,000 female Louisiana residents.

Further, it has been argued that female offenders have a different pathway to rehabilitation than male offenders. A study shows that 80% of female inmates experienced some sort of abuse prior to entering the prison, This renders the female population to be more sensitive to quotidian prison practices such as strip searches, common shower-rooms, and lack of privacy. The greater importance of abuse in female prisons relative to their male counterparts lies in the fact that, for women, this environment reminds them of the environment they experienced outside more often so than in the case with men.

Additionally, women more often than men are sole caregivers to their children, and many women are pregnant even upon entering prison. The importance of their connection with their children has a great impact on rehabilitation and positive reentry into the society.

This thesis tests a possibility of a gender specific design for rehabilitation. It does not claim to be a reformation to the prison system but, rather to prison architecture. Inspired by Panopticon, one has to reject its form in order to provide everyday stimuli for rehabilitation. Through the medium of architectural design, this thesis will attempt to instigate a dialogue questioning the following hypothesis:

Spatial and visual interaction with the outside world is necessary for the sustainable reformation of prison inmates. Economic revitalization of areas of high incarceration can subsequently reduce the incarceration rates. Merging the two gives rise to key questions: "What are the architectural implications of a prison that is both secure to prevent escape and porous to allow for the infiltration of the community that surrounds it? And, what are the urban implications of an institution that, instead of benefiting corporations, gives back to the community in terms of space and resources?"



#### Identifying Current Design Goals for Existing Prisons:\*

**Protection:** exterior boundaries to protect the public and the interior boundaries to protect some inmates from others.

**Reform:** acquisition of moral, religious, and social habits. Requires special environement

# Identifying Design Goals for Porous Female Prison:

Containment: exterior boundaries still exist to protect the public AND to protect inmates from previous hostile environemnts but the transition is made easy...the interior boundaries removed and instead a progression of privacy of spaces introducud to create and emphasize the culture of safety.

Communication: spatial interconnectedness and the environment of learning about connections among different areas of life, will encourage the culture or openness. It is an environment that facilitates movement, interac-

Cure: criminal behavior seen as personal and not social habits, despite evidence of the

Attachment: a culture of belonging. Understanding spatially where in rehabilitation process where she is is, and where she is heading. Space that facilitates the awareness of belonging to the envornment of support and being

Punishment: Deterrent for inmates and those outside. To "cure" former of crime and

Agency: While maintaining main building aspect; security, durability, sanitation, etc, the architecture of prison can serve in carrying out a culture of empowerment, creating "selfsufficient women that don't fall back into

**Exemplary Righteousness:** A public Statement of moral, political and social virtue. The internal life of inmates is less important.

Involvement: through programming of shared recreational and eductaional spaces, as well as eductaion on community issues that affect criminal behaviour, create an openess to community, both through space and programming. Through community volunteers create healthy connections with the outside world and maintain and emprove positive relationships with

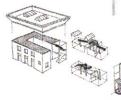
\* Architecture of Incarceration editor Iona Spens 27

## Precedents

Case Study # 1 Involuntary confinement Mutter-Kind-Heim | Frankfurt am Main, Preungesheim, Germany





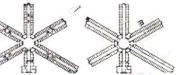






Case Study # 2 Involuntary confinement HM Prison Manchester | Manchester, U.K.





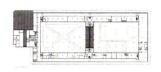


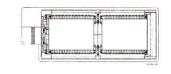




Case Study # 3 Involuntary confinement De Schie Penitentiary | The Netherlands

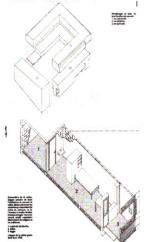












Case Study # 4 Voluntary confinement Le Corbisier's Convent of La Tourrette

Case Study # 5 Involuntary confinement Maison d'Arret de Brest, Brest, France

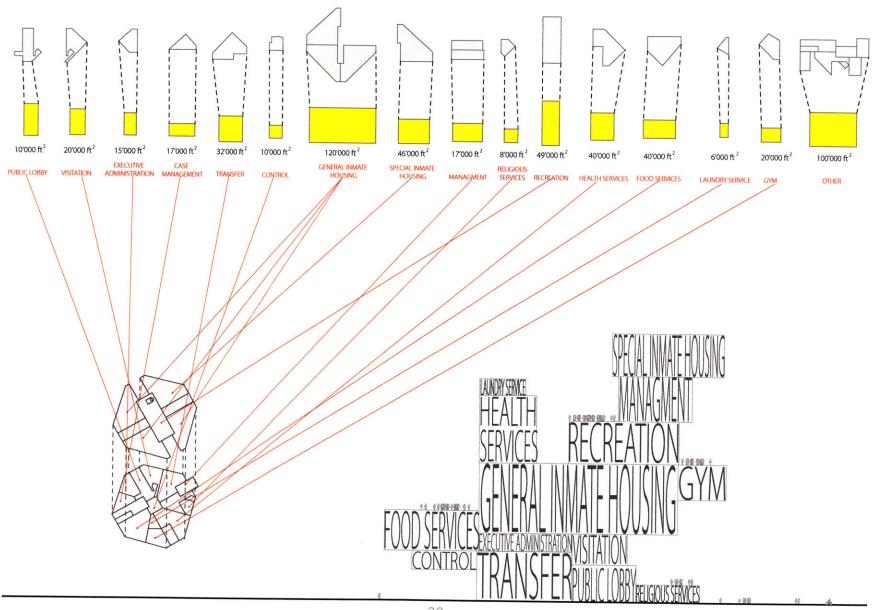


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Case Study # 2 Involuntary confinement HM Prison Manchester | Manchester, U.K. Case Study # 3 Involuntary confinement De Schie Penitentiary | The Netherlands Case Study # 4 Voluntary confinement Le Corbisier's Convent of La Tourrette grand Protection & Cure; this precedent puts emphasis on isolation and crime as personal choice Containment & Agency; Exemplary Righteousness & Protection; one directional flow and a clear separation of the convicted on one side and the employees and the visitor on the other, manifests the power of one over the other. This scheme is looking inwards towards the playground and over into the other cell. The looking inwards idea of Panopticon is softened by the viewing the sports field instead of the guards. d ales A powerful spatial condition occurs in the case of the unconvicted, that are wedged in between the innocent and the convicted. A powerful aspect of this design is it's settle entry way off of the main road. 252 cells take up 15% of the gross building footprint, the rest is used for office space, recreation, etc. De Schie / Light porocity. Light & Vew from -gual Stoor 11111= Lig ons resin. visit a orein. the let 12 PUPLYC LART ANJUNTO --EJURTE Anen kiteluns & recreation VIEW OF LIGHT TTL Alterit VIEW LODZING INWALDS EIFFIENCE mmmm Light Anove. Ł Engio Discreet en TUTTUT Attachment 9



## Program

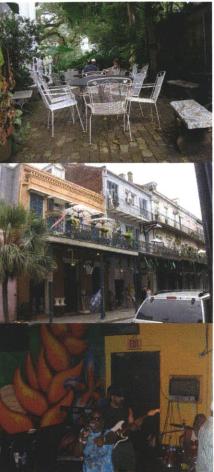
Programs borrowed from New Orleans:

dining in the courtyard

covered street shopping

attending performances





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This thesis proposes a program that would accommodate child-friendly visitation, a clinic for substance abuse, STD testing, education, pregnancy monitoring, and a childcare facility for infants born while in prison and children under the age of two. In addition, the proposed program provides a connection to the community and staff through integration functions such as cooking school with a restaurant open to the public, a beauty school where women would be trained for employment in a salon, childcare facility maintenance training, and gardening and craftsmanship training programs. Direct and indirect links between the women and the community plays a crucial role in the design and programming of this prison.

The ground floor is mostly open to the public, consisiting of commercial programs such as shops, a restaurant, and a spa facing the street and making a connection with the business district to the north. The other side of the building, which faces the community, also offers entry into a public library, parts of which are used by inmates and other parts by the public, making the library resources available to both. Additionally, there is a childcare facility and a free clinic for the community.

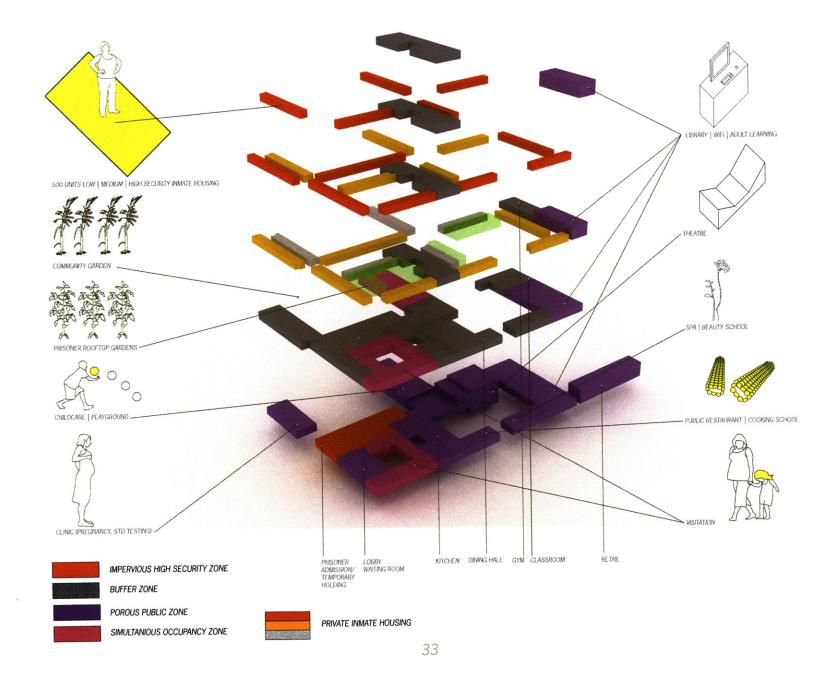
Between the street commercial strip and the community lay-Ber of childcare, clinic, and library, there is a theatre open to the general public. The theatre is a place of simultaneous occupancy of the offenders, whose seats are located on the upper level, and of other viewers and performers of the show. The roles may also be reversed:the concert may be open for families and friends of the inmates, and the performances may be acted out by the offenders. Another instance of simultaneous occupancy is the visitation center, wherein every woman inmate gets a separate video-monitored room facing a small garden that is accessible only through the building. This space is especially important for child-aged visitors, creating a safe and friendly privacy between the woman and her child.

The completely 'locked-down' parts of the ground floor are the prison admissions and the yard for delivery of goods, as well as staff offices and rooms.

The second floor acts as a buffer zone. Similar to a fence circumventing a traditional prison, this sectional barrier is a zone of high security, allowing only minimal access to the ground floor. However, this area hosts the most open program: areas for crafts, a clinic floor for inmates, a space for infants whose mothers are incarcerated in the facility, and a dining hall. The communal nature of this program allows for a great level of learning and interaction but can also create conflict, therefore only women at the low and medium security levels (thus having maintained a good behavior record) are allowed on some if not all of the parts of this buffer zone. The library at this level is mostly available to the public but does host five classrooms for adult learning for prison inmates.

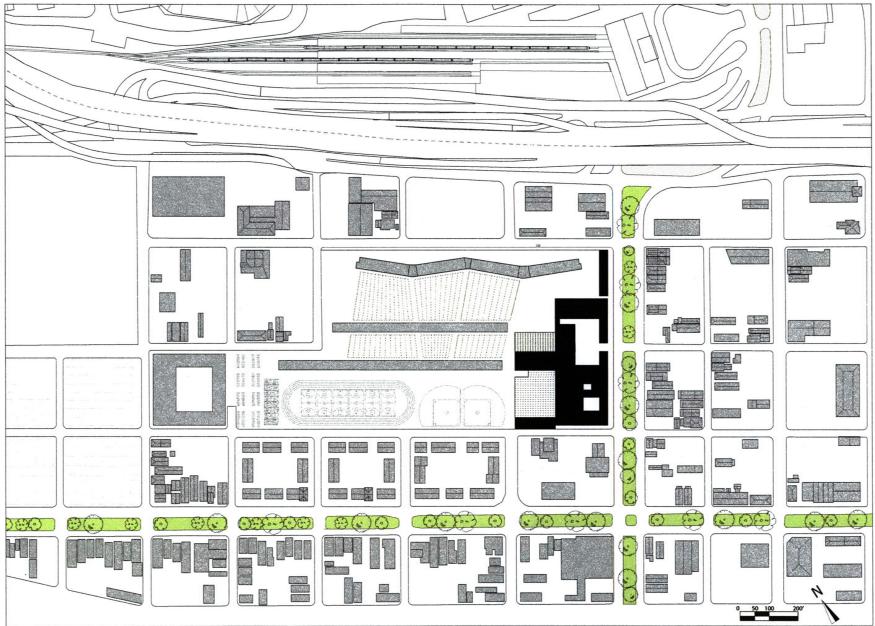
The third floor hosts twenty low security units with access to a private garden that is maintained by inmates and secured by an ornate fencing system, itself a framework for growing plants. The rest are medium security units and a gym and the library for the inmates.

The forth and fifth floor (the plans of which are not shown) has a mix of medium and high security inmate units, access to the library for inamtes, and computer classrooms.

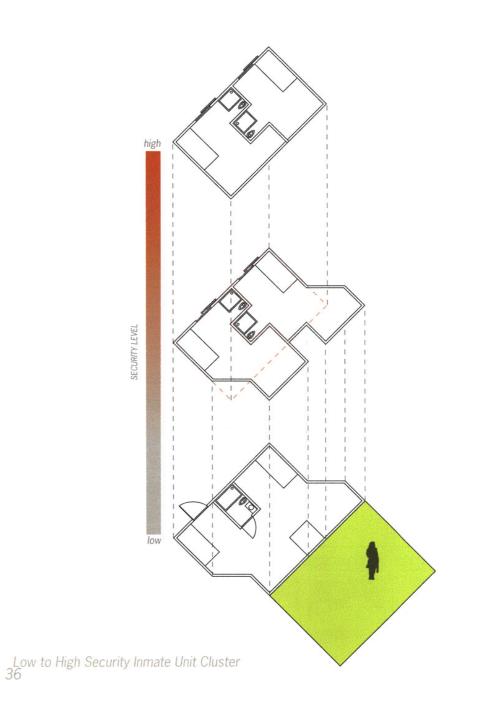


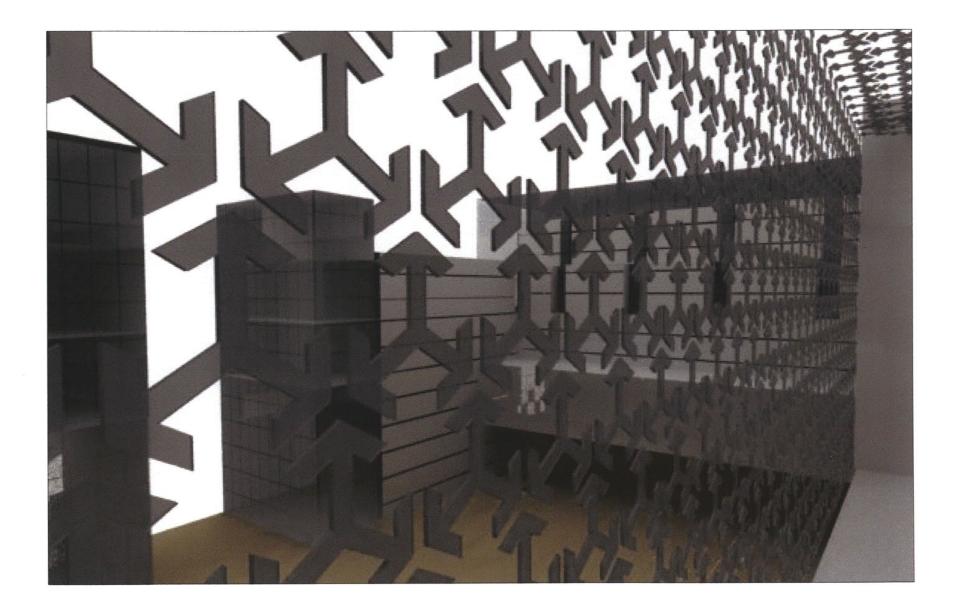
Drawings and Perspectives

Opposite Page: Site Plan



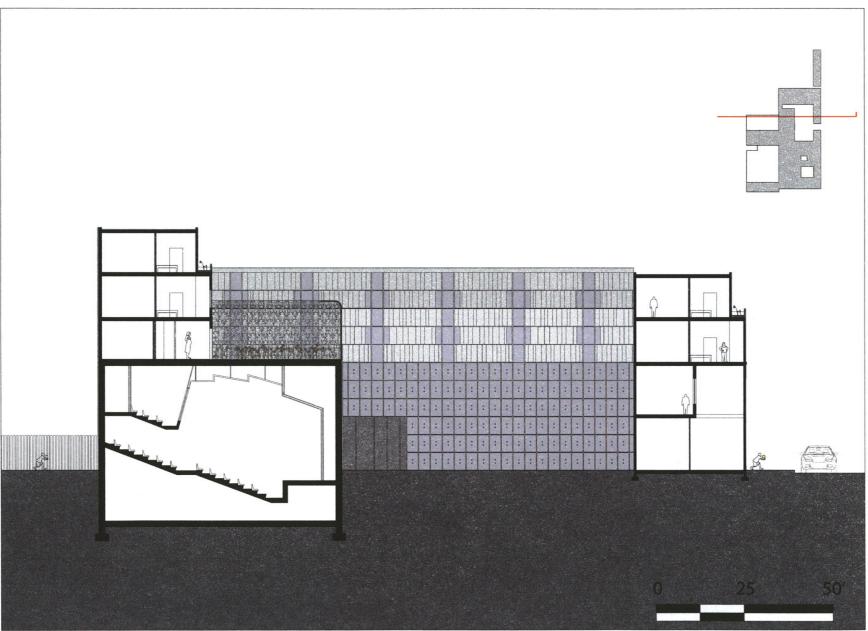


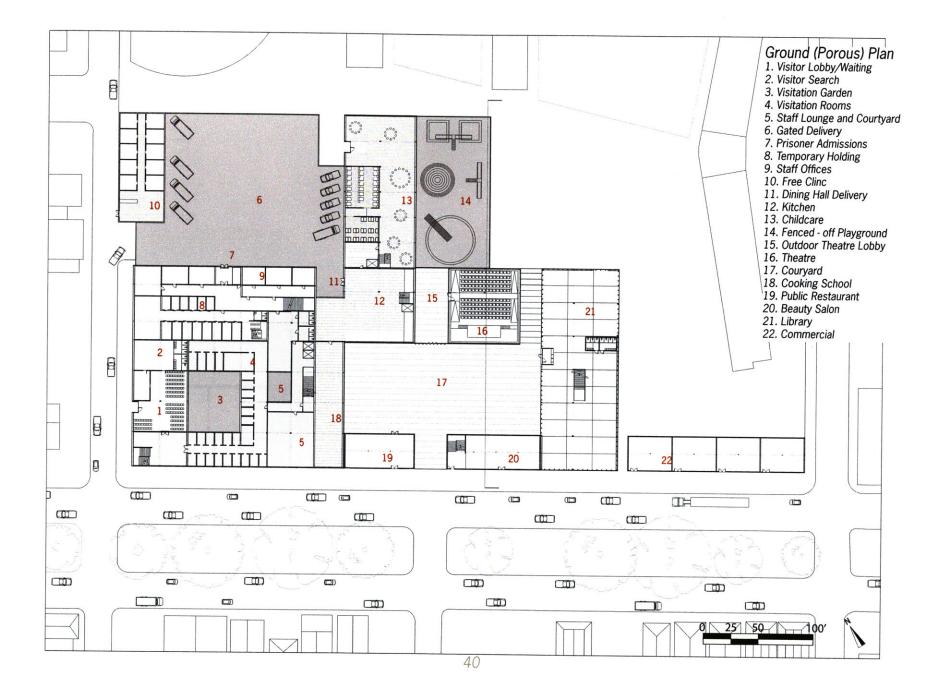


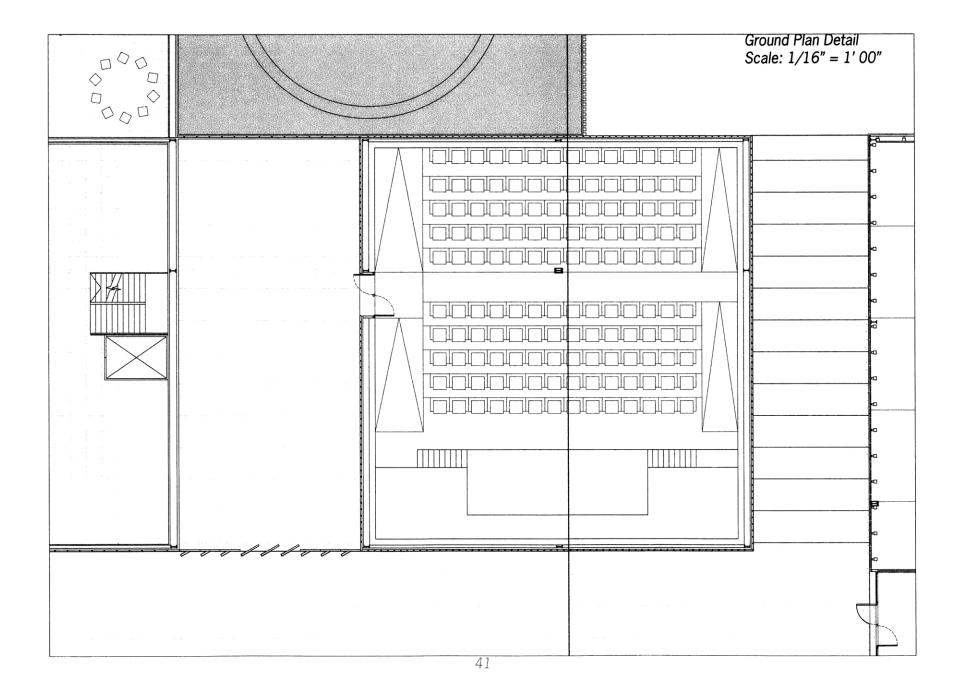


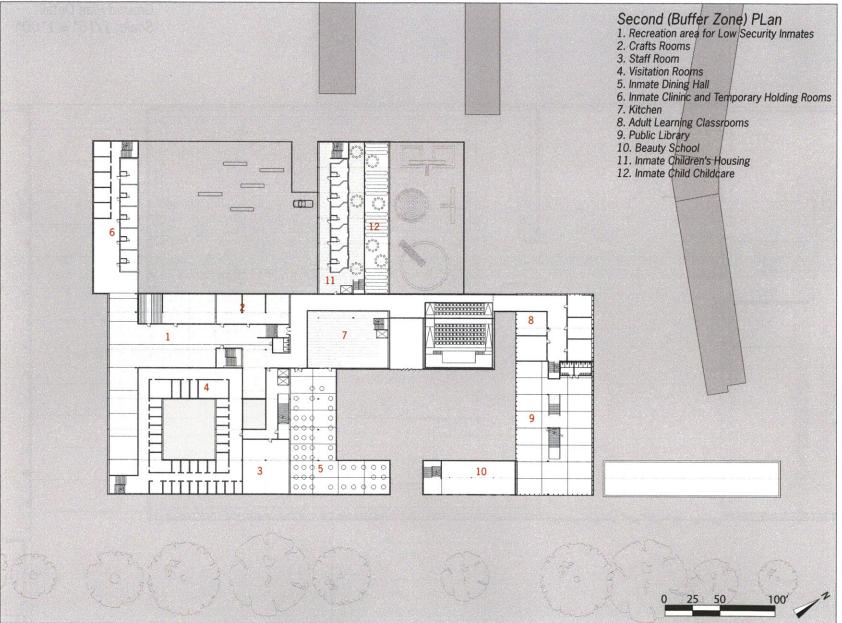
opposite page: Section Through a theatre, a couryard, three levels of security housing units and a beauty salon.

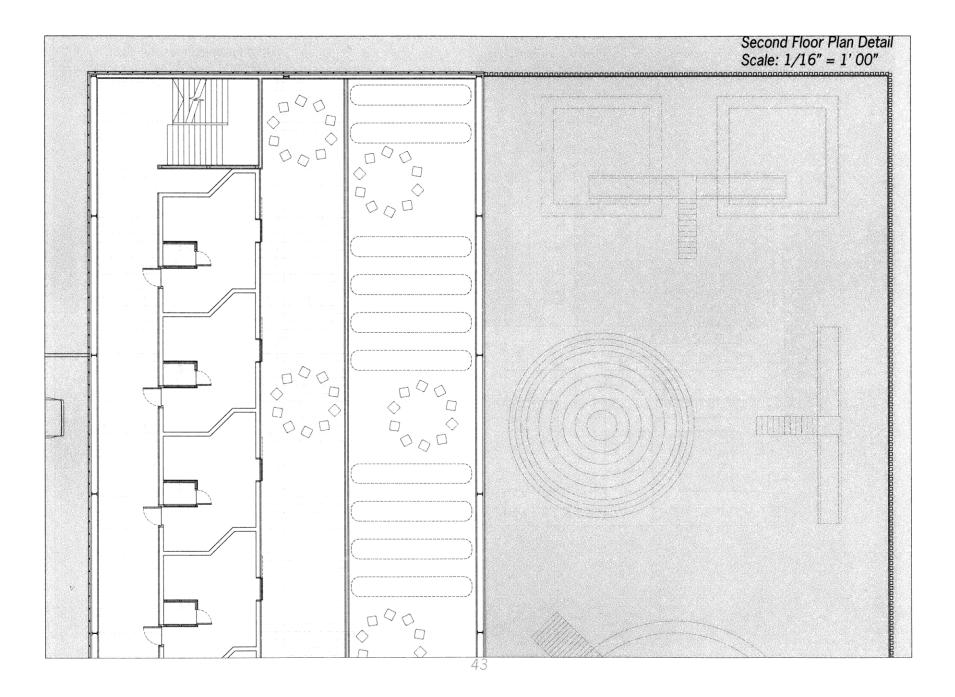
The theatre is a place of simultaneous occupancy of the offenders, whose seats are located on the upper level, and of other viewers and performers of the show. The roles may also be reversed:the concert may be open for families and friends of the inmates, and the performances may be acted out by the offenders.

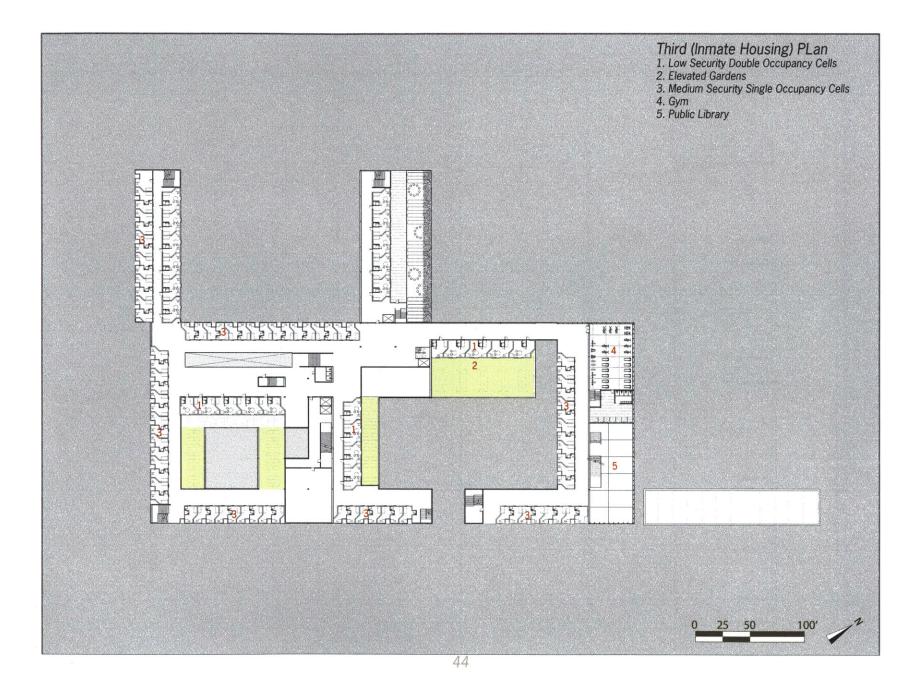


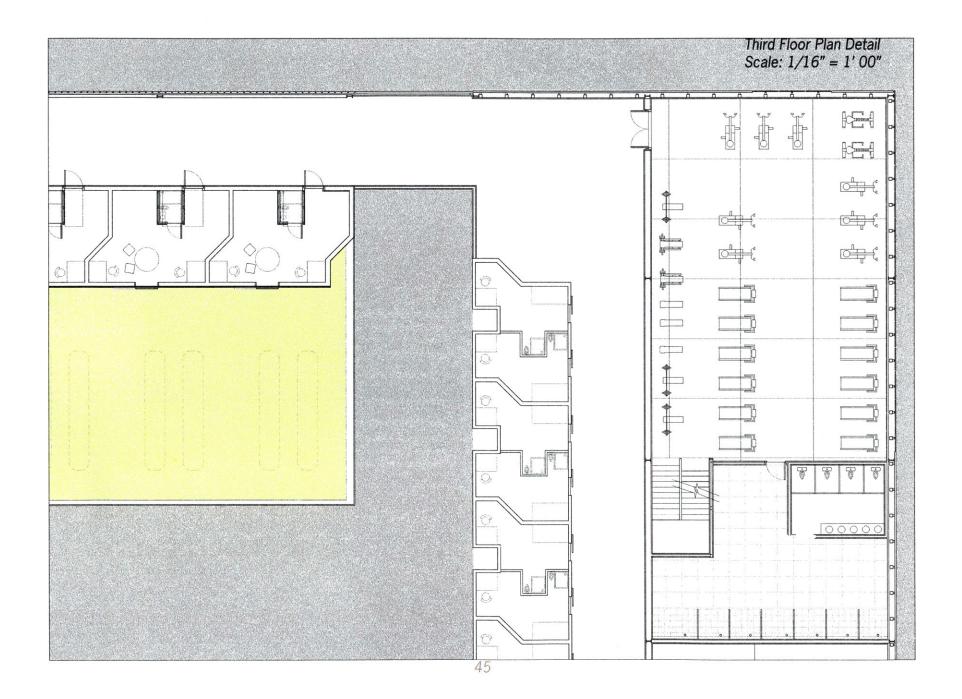






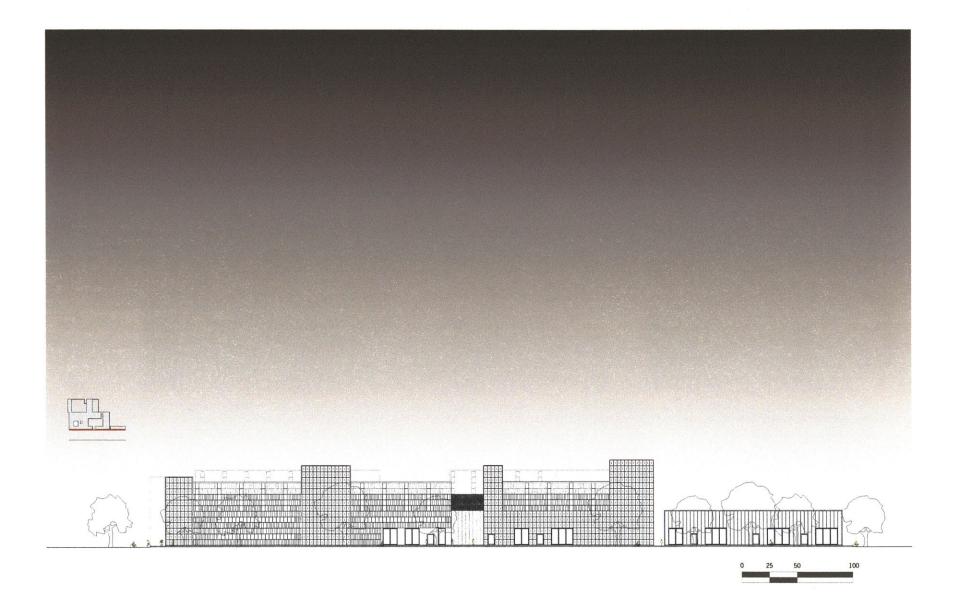






opposite page: Street (commercial) Elevation

The ground floor is mostly open to the public, consisiting of commercial programs such as shops, a restaurant, and a spa facing the street and making a connection with the business district to the north. 46

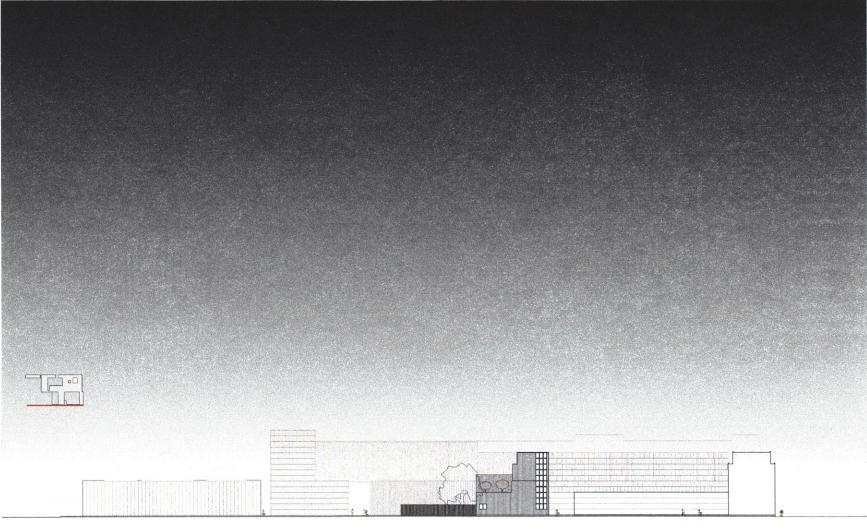




Street (commercial) Perspective

## opposite page: Community Side Elevation

The community side of the prison offers entry into a public library, parts of which are used by inmates and other parts by the public, making the library resources available to both. Additionally, there is a childcare facility and a free clinic for the community. In the existing empty space between existing housing units there will be a sports field and playground for children in the community and the adjacent to the site school children.



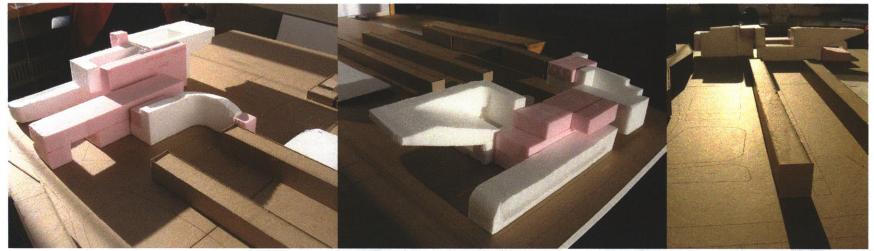




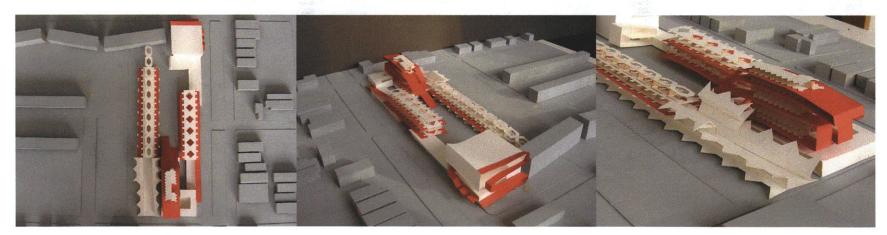


Community Side Perspective

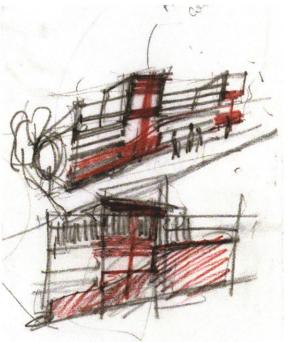
## Process



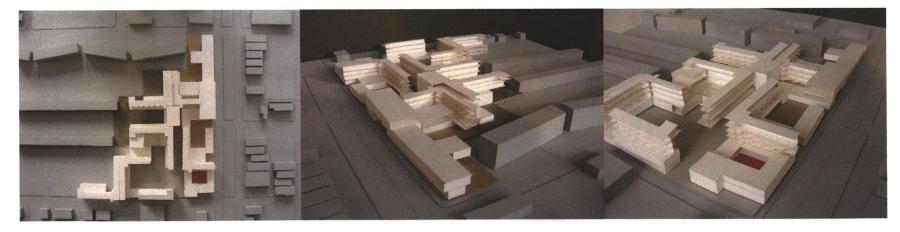
Programatic Massing Models



Unit Cluster Driven Sketch Model



Prison's Accesibility to Public (in red) Sketch



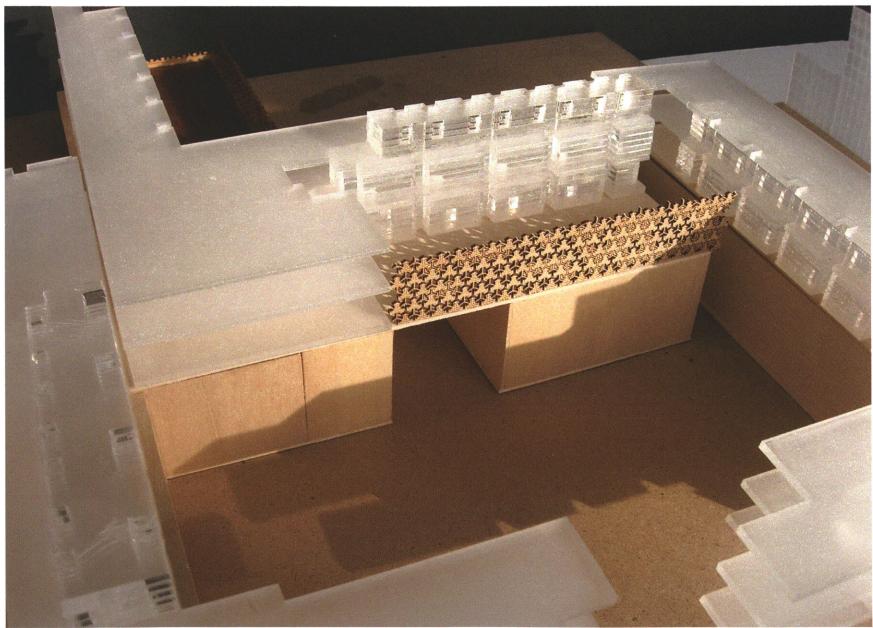
Unit Cluster Driven Sketch Model #2



Sectional Idea Model



Diagramatic Final Design Model





Dining in the Courtyard with a view of Elevated Gardens

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