



## Prison Softening in the 21<sup>st</sup> Century

Michael L Rush

### ABSTRACT

Correctional departments are interested in new generation prisons. Innovative and progressive architectural designs are utilized to enhance rehabilitation efforts. Criminologists revisit spatial theories to determine if indirect or direct relationships exist between prison architecture and overall offender outcomes. The following research brief provides a thorough and comprehensive assessment pertaining to correctional facilities around the globe. Architectural comparisons are made between past and contemporary designs, as well as cross comparisons between prisons from different countries. Ultimately, the literature directs correctional decision makers and researchers to consider prison architecture as an additional method to rehabilitate offenders by emulating life outside prison prior to release. Suggestions, implications, and limitations are discussed to expand prison softening research.

### INTRODUCTION

In recent years, correctional departments in the United States, and throughout the international community, created new innovations to improve prison architecture to soften correctional facilities. Such innovations include the introduction of new generation prisons in the late 20<sup>th</sup> and 21<sup>st</sup> centuries, containing innovative layouts and interior design. Correctional policies and cultural aspects greatly influence prison architecture. Therefore, prisons constructed during the 19<sup>th</sup> and early 20<sup>th</sup> centuries possessed layouts designed to portray correctional objectives relevant to that time. Policies projected control and institutional establishment which reflected in prison architecture. Today correctional policies are changing, resulting in prison designs reflective of evolving rehabilitation strategies. Specifically, the need to prepare offenders for their reintegration into society through safe and functional prison environments. Ideally, applying spatial concepts in prison layouts, may help offenders learn how to become functioning members of society. In regards to current rehabilitation strategy, this is the prison softening approach correctional decision makers and researchers are now investigating.

To discuss prison softening, it is necessary to address the relationship between architecture and rehabilitation efforts. The purpose of this research brief is to address prison architecture, layout types, interior design and the possible correlations those elements share with rehabilitation outcomes. For the purposes of this brief, rehabilitation outcomes are identified as social behavior, the perception of their correctional environment, and more importantly, how the architecture of new generation prisons may influence post-release self-sufficiency outside of prison by emulating daily routines and activities. New generation prisons are those with progressive spatial concepts built into their architecture, layouts, and interior design. The literature comprises of studies within the past fifteen years, and describes an array of design characteristics from correctional facilities around the globe. Architectural development and breakthroughs are thoroughly discussed to determine how offenders respond to their prison environment. Recommendations, limitations, and implications are shared to provide further direction regarding innovative prison architecture and its role in corrections. First, historical findings are discussed to depict a timeline illustrating the evolution of prison design.

Research Brief

## HISTORY BEHIND PRISON ARCHITECTURE

To better understand the relationship between architecture and correctional facilities, it is essential to address the historical background associated with design and development. Correctional policies share a correlation with society's perception about rehabilitation. Connections between rehabilitation and architectural design stem from correctional perception from centuries ago, and play a significant role in contemporary facilities. Aside from standard objectives such as establishing security and surveillance, a connection between the authority of the state, its institutions, and rehabilitation, greatly influenced prison architecture. Hancock and Jewkes (2011) explained that as prisons emerged and factory systems developed (in industrial nations), so did a monumental architecture of regulation and control to display the power of the state. This approach led to spatial designs created to disturb, label, and segment offenders in correctional facilities. Evidently, correctional facilities in the 19<sup>th</sup> century communicated a message of crime deterrence and the uncompromising attitude of the State's retribution.

Initial architectural designs for larger correctional facilities greatly impacted offender behaviors. Hancock and Jewkes (2011) mentions the bleakness of most prison architecture combined with a restrictive economy of space, which led to questions regarding whether these design characteristics lead to negative penal outcomes. Only after additional research was conducted, did architects question how designs could be implemented to promote higher rates of successful offender rehabilitation. For example, the National Institute of Corrections (1998) reported similar findings about jail design, suggesting that projecting an image reminds people of the type of place a correctional facility is, establishes their expectations for what will happen there, how offenders will be treated, and how they should behave. Nineteenth century Victorian correctional facilities exhibited psychologically and physical unhealthy environments, consisting of space limitations and minimal lighting which limited architectural progression (*Appendix B, Figure 6 – 9*). The U.K. still operates 29 of these jail facilities (Moran & Jewkes, 2015). Utilitarian designs soon followed in the U.K. during the twentieth century and rejected decorative aesthetics, still prioritizing heightened security (higher walls and increasing surveillance). Such examples encouraged researchers to investigate how new prison architecture might contribute to different rehabilitation outcomes (Hancock & Jewkes, 2011).

### Architectural Breakthroughs and Spatial Concepts

According to Gary (2006), architecture and inflexible environments may result in displays of noncompliant and aggressive behavior among offenders. Attention towards these issues encouraged decision makers to consider implementing progressive architectural design, since facilities should reflect and aid the implementation of contemporary correctional philosophies and goals (Waid & Clements, 2001). Reevaluating how space was used became a crucial factor pertaining to prison architecture in the 21<sup>st</sup> century. Special attention was directed towards carceral space (process of identifying how the goals of a criminal justice system are expressed through prison architecture). Also, coined as human geography, carceral space is a crucial element for prison architectural development. Much can be determined about how correctional departments are conducting rehabilitation efforts, handling offenders, and assisting with their future, when considering how space is allocated and managed in correctional facilities (Moran & Jewkes, 2015). For most prisons, exterior features are recognized as places of detention and punishment (Moran & Jewkes, 2015). Research concepts such as carceral space helps researchers and correctional decision makers to revisit architectural topics. Such research provides a clearer perspective of the intentions behind architecture, design, and spatial management (Moran & Jewkes, 2015).

### Case Studies

#### *China (Appendix A, Table 1)*

Correctional facilities outside of the U.S. share architectural similarities. Design trends exist between different countries. This is due to correctional departments sharing similar security goals such as preventing escape or increasing surveillance. For instance, Chinese prisons construct tall, thick walls, barbed wire, and watchtowers. Mitigating escapes is a critical priority, and if resources are limited, Chinese prisons are built in rural areas and distanced from metropolitan regions (Gary, 2006).

### *Europe (Appendix A, Table 2 - 3)*

Although European correctional facilities also prioritize for security and surveillance, steps were taken to experiment with progressive designs. Moran and Jewkes (2015) found that European countries designed prison layouts to create more open, flexible, and normalized spatial planning. Features include soft furnishings, utilizing color schemes throughout sections of prisons, using or mimicking daylight, and incorporating organic materials such as trees and water features. However, some European countries still maintain traditional layouts. For instance, due to security breaches in the 1990s, the U.K. increased security, affecting the quality of life in their correctional facilities.

### *Scandinavian Countries (Appendix A, Table 4)*

Countries often experience developmental stages throughout time. As illustrated with the Chinese and European examples, prison architecture runs parallel with correctional policies. Since correctional policies correlate with a country's social framework, prison architecture changes as social policies mature. For example, per Pratt and Erikson (2011) living conditions in Scandinavian prisons is an outcome of long-term socio-political forces and cultural values. Their prison development is categorized in three phases associated with relevant sociological factors:

1. 1930s – Prison represented a sanctuary from the temptations of the world outside
2. 1930s to 1960s - Prison is a sanatorium for morally and mentally sick offenders
3. 1970s to present – Prisons are normalized, with its internal conditions reflecting those of the outside world

In fact, many criminologists identified correctional departments throughout the international community with developmental stages pertaining to prison architecture influenced by domestic social variables. Jewkes and Dominique (2014) uses Norway as a prodigal example of developing prison architecture in Scandinavian countries. Halden prisons (*Appendix 2 Figure 10-16*) in Norway feature natural construction materials, varied color palettes, and maximizes daylight by avoiding the use of bars on windows (*Appendix B, Figure 16*). Other features, such as stimulating landscaping, are also used to enhance prison architecture in Denmark and Greenland.

### *Australia (Appendix A, Table 5)*

Architectural development in Australia started with austere designs in the 19<sup>th</sup> and early 20<sup>th</sup> centuries. Although contemporary architecture is now in use, variations exist between different regions in Australia. Grant and Jewkes (2015) indicated that correctional facilities in Victoria and New South Wales accommodate therapeutic treatment environments. Space is now allocated to separate offender groups based on treatment needs. Steps were also taken to upgrade female facilities to replicate family and community responsibilities. However, their prison architecture is not uniform. This is exemplified in areas such as Queensland, where a “one size fits all” approach is taken by utilizing podular designs and sparse fittings due to limited funding. Some architectural designs were influenced by U.S. models (Grant & Jewkes, 2015).

### *United States (Appendix A, Table 7)*

Previous U.S. architectural design organized penal regimes, and separated offenders into different units based on age and risk. Coined the Auburn design (used in New York), such facilities were used from the 1800s to 1900s and comprised of cells built back in tiers, contained more offenders per block for efficiency and surveillance purposes, and had a Victorian appearance, like older UK Victorian jail systems mentioned earlier (Waid & Clements, 2001). Grant and Jewkes (2015) the U.S. Federal Bureau of Prisons prioritized security and control policies due to increasing incarceration rates and limited correctional staff availability. Later, the U.S. implemented triangular podular designs tested in Chicago. However, Beijersbergen, Dirkzwager, Van der Laan, and Nieuwbeerta (2016) indicated that new generation prisons in the U.S. now focus on small units, utilize direct supervision, and focus on offender-staff interactions. Also, unlike countries such as China, correctional facilities are closer to local cities to grant offenders access to family, legal services, and court systems.

## HISTORY BEHIND LAYOUTS

The previous section described the correlation between prison architectural development and socio-political changes in society. Essentially as culture evolves, so do the correctional policies within the country, thus influencing architectural design (e.g. security, surveillance, or progressive rehabilitation concepts). On the same token, interior prison layouts share a similar pattern. Correctional decision makers update layouts to meet changing rehabilitation objectives. Regarding the topics associated with prison layouts, spatial emplacement is highly prioritized. By the 19<sup>th</sup> century prison design utilized both cellular and institutional confinement, securely anchoring offenders in space, removing them from spatial circulation, and to easily observe offenders (Hancock & Jewkes, 2011). Hence, space was originally utilized to promote complete security and control over offenders during incarceration, with minimal flexibility.

However, traditional protocol would soon evolve into more elaborate goals. Later, prison space would be designed to explore the value of more open, flexible, and playful spatial planning. For example, increasing penal challenges such as overcrowding may encourage correctional departments to pursue more secure and sanitary structures. Reevaluating how technology effects flexibility in correctional facilities is also discussed by researchers. Moran and Jewkes (2014) explained that a prison's physical layout and the obvious presence of cameras for long distance monitoring may create an artificial environment, which may provoke paranoia and negative behavior among offenders. Moreover, internal landscaping, fixtures and fittings of traditional prisons all convey clear messages about the offenders confined within them, their supposed characteristics, and how they are supposed to behave (Hancock & Jewkes, 2011).

Connections may exist between layouts and offender behavior. According to Tartaro (2003) manipulating the physical environment should be an important aspect of any jail and lockup suicide prevention plan, because overreliance on offender isolation may exacerbate the situation. Proper preventive design reduces the opportunity for suicide and alleviates distress. Again, such efforts are important when considering the correlation between prison layouts and rehabilitation efforts. The following section provides a thorough overview of various prison layout used throughout the international community.

### Layout Types

Correctional departments experiment with prison layouts to meet changing rehabilitation policies. Design characteristics including, but not limited to, the size of living quarters, shape of communal living spaces, and offender complement per cell block, are essential variables when observing architecture and rehabilitation correlations. For example, the American Correctional Associations Standards, the design capacity of prisons should be no more than 500 offenders (Gary, 2006). However, correctional departments across the international community maintain varying standards. German prisons can average about 325 offenders per facility, Sweden at 300, and China at 1500 offenders for smaller correctional facilities (Gary, 2006). Pratt and Eriksson (2011) found that Scandinavian prisons may only have 50 – 60 beds per facility. Examples including average offender living space, to how offenders should be separated or congregated, represent influential factors associated with correctional policy. Layouts are described in further detail to describes various layout types and design principles.

#### *Radial Layout (Figure 1)*

Designed on the principle of keeping offenders in solitary confinement, radial layouts prevented offenders from communicating with each other to promote self-reflection, remorse, and moral elevation (Beijersbergen et al., 2016). These layouts were



**Figure 1** Forest Bank Prison  
Manchester England (*Radial Layout*)



Telephone Pole Design (Luther Unit)

Figure 2 Jordan Unit Correctional Institutions Division United States, Texas (Telephone Pole Design)

*Telephone Pole (Figure 2)*

Whereas radial layouts were centralized around a single control center, telephone pole layouts contained multiple control centers. A 20<sup>th</sup> century design, each cell block had its own control central in addition to the main central corridor, and included space for mental health treatment. This layout includes self-enclosed styles, eliminating the need for external walls or fences (Waid & Clements, 2001). However, large dormitories reduced offender social space and was directly related to offender stress and maladaptive behavior (Waid & Clements, 2001). Although this design integrates space and facilities for unique offender needs, security and surveillance in the telephone pole layout is still prioritized.

used by several countries starting in the 18<sup>th</sup> and 19<sup>th</sup> century. Some are still operating today. Although not popular in the U.S., countries including England, Ireland, Japan, and the Netherlands utilized this model. Radial layouts were considered efficient since the security post is in the center of the facility, thus streamlining surveillance with the center building's windows (Beijersbergen et al., 2016). The layout was meant to give the warden control over the movements and activities of both offenders and correctional officers (Johnston, 2004). However, adverse effects resulted with the use of this design. The layout was too expensive to operate and caused offender traffic due to the array of cell blocks clustered in a wheel shape formation (Waid & Clements, 2001).



Campus Design (Jordan Unit)

Figure 3 Jordan Unit Correctional Institutions Division United States, Texas (Campus Layout)

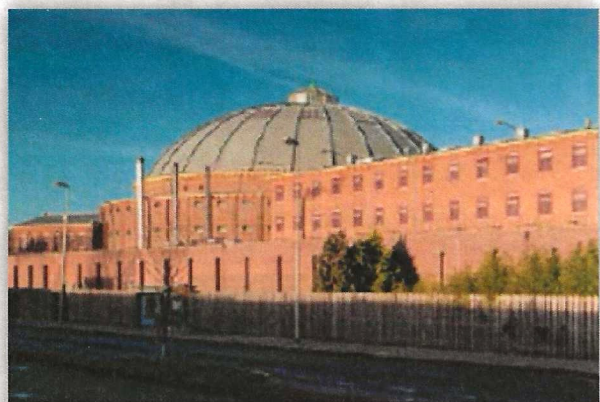


Figure 4 Correctional facility Breda Netherlands (Panopticon Layout)

*Campus, Panopticon, Courtyard, and High Rise Layouts (Figure, 3, 4, 5, 6)*

Rapid correctional policy changes in the Netherlands engendered multiple layouts through the centuries to meet rehabilitation goals. The panopticon layout also prioritized surveillance. Constructed in the 19<sup>th</sup> century, it also emphasized control and discipline and consisted of a circular structure with a dome roof and cells arranged in tiers on the circumference of the circle for increased observation (Beifersbergen et al., 2016). However, Beifersbergen et al. (2016) found that after refocusing efforts on rehabilitation strategies, the Netherlands emphasized small units, communal activities, and homely atmospheres. Such layouts include the high rise, which consisted of multiple small stacked pavilions, consisting of 24 single cells and communal



**Figure 5** Correctional facility Rotterdam – De Schie Netherlands (*Courtyard Layout*)



**Figure 6** Correctional facility Over-Amstel Netherlands (*High-Rise Layout*)

living rooms. Courtyard layouts were constructed to include inner courtyards, and campus layouts consisted of freestanding pavilions arranged in large open spaces to increase staff and offender interactions.

#### *Podular and DCL*

Steps were also taken to improve surveillance, while increasing interaction between correctional staff and offenders to reinforce relationships within facilities and mitigating maladaptive behavior. For instance, primarily used in jails and developed in the U.S., the podular design provides either direct or indirect supervision by having mostly single-occupancy cells located around a dayroom. Moreover, the layout also enhances interaction between correctional officers and offenders (Tartaro, 2003).

Perhaps, the most innovative prison layout is the Detention Concept Lelystad (DCL), for short-term male detainees in the Netherlands. Built in 2005, four innovations from this layout include six-prison cells, a behavioral approach toward offenders, electronic control devices, and a self-managed team of correctional officers (Kenis, Kruyen, Baaijens, & Barneveld, 2010). This layout is popular since the design prepares offenders for their return to society (Kenis et al., 2010). Unlike the previous layouts mentioned, this design simulates activities, responsibilities, and daily routines associated with a regular lifestyle in society. Like the pattern found when comparing prison architecture to social policies, the DCL layout exemplifies a notable step towards focusing efforts on offender rehabilitation in the Netherlands.

## **INTERIOR DESIGN**

In addition to architecture and facility layouts, interior design holds a unique role in the rehabilitation process. Increasing interaction within prison environments (between offenders and correctional officers) is beneficial in regards to behavioral outcomes and social development. When observing the correlation between architectural design, facility layouts, and correctional policies, some correctional decision makers transitioned from a heavy emphasis on security, surveillance, and confinement, to creating flexible prison environments. New generation prisons focus less on isolating offenders, and more on living space influential to self-development. Designing these environments to help offenders learn how to become functional individuals is recognized as a promising rehabilitation method.

## Theory Behind Design

Hancock and Jewkes (2011) found that a prison environment can influence or even prescribe patterns of behavior, thinking, and individual/group identity formation. How space is created, used, and allocated, can either limit or expand individual growth. Traditional prison environments with features such as echoing corridors, dim lighting, and limited interior colors schemes is related to the psychological compression of offenders. However, today the goal of new generation facilities is to normalize the prison environment. In other words, changing prison décor to make a prison look and sound noninstitutionalized can reduce offender stress and enhance rehabilitation (Tartaro, 2003). Moran and Jewkes (2014) provided a sound explanation from prior research of the correlation between interior design and individual growth:

“...progressive and highly stylized forms of penal architecture, which both reduce environmental impact, and provide environments which are intended to rehabilitate, designing internal prison spaces with soft furnishings, color zoning, maximum exploitation of natural light, displays of art and sculpture, and views of nature through vista windows without bars. This kind of design of new prisons, in the northern European context typified by Norway, Iceland and Denmark, arguably plays up and enhances certain generic expressions of affect connected to openness, flexibility and “humane” treatment, to evoke certain kinds of inhabitation encouraging personal and intellectual creativity...”

(Moran and Jewkes, 2014)

In addition to normalizing prison environments to reduce stress and improve offender behavior, progressive interior designs serve another critical purpose. Since offenders are incarcerated for long durations of time, reintegrating those individuals back into society becomes challenging. Aside from encountering unfamiliar changes in society after release (e.g. technology and cultural change) or reentry obstacles (e.g. establishing housing and legitimate employment), offenders may not possess rudimentary soft skills to effectively maintain a daily routine. Thus, interior design in new generation prisons focus on emulating tasks and responsibilities to replicate what life is like outside of correctional facilities.

## Emulating Life Outside of Prison with Interior Design

Various interior design floor plans are used to accomplish simulation methods in prisons. For example, Halden (a facility in Norway, *Appendix B, Figure 10 – 14*) integrated high-spec kitchen areas where meals can be prepared. Such domestic spaces replicate designs by contemporary house builders (Hancock & Jewkes, 2011). Australian prisons also incorporate a combination of living accommodations including kitchens, bathrooms, and securable verandas designed to create autonomy and self-sufficiency through daily tasks and routine upkeep of their living area (Grant, 2006). Living areas are authentic by removing bars, security grills, and long corridors throughout the new facilities (Grant, 2006). Washing machines, driers, and kitchen appliances are used in Dutch prisons where offenders are responsible for heating their meals, washing their clothes, and cleaning their cells (Kenis et al., 2010). Ideally, by utilizing progressive interior designs in correctional facilities, it is possible to help offenders develop routine skills necessary to establish fundamental lifestyles after release.

Although it was not until the 21<sup>st</sup> century when these concepts were integrated into architecture, layout, and interior design, prior research and correctional policies already highlighted beneficial ideas for rehabilitation goals. For instance, correctional departments in Finland and Sweden acknowledged this approach during the 20<sup>th</sup> century. The Swedish Prison Administration Decree in 1975 advocated normalization, since prison conditions could be arranged to resemble the common living conditions in society (Pratt & Eriksson, 2011). Correctional departments mirrored the same methodologies in some jail systems. Architects of new generation jails applied no institutional or normalized environments to potentially generate constructive offender behavior (Tartaro & Levy, 2010).

## HOW OFFENDERS RESPOND TO PRISON LIVING SPACES

Observations within this brief provides a clearer understanding about the association between architecture, layouts, interior design, and rehabilitation. The literature highlights how these elements play an important role in offender outcomes. Specifically, providing an environment designed to mitigate stress, while preparing offenders to become functioning members of society, may be possible by emulating living spaces to routine lifestyles in society. However, research also indicates mixed results when architecture, facility layouts, and interior design are compared to rehabilitation efforts.

Given the literature provided in this brief, harsher and rigid prison environments may correlate with counterintuitive rehabilitation strategies. Morris and Worrall (2014) lists a few perspectives regarding the relationships between environmental variables and offender outcomes. The Deprivation Perspective posits that when an offender is subjected to a restrictive environment (e.g. prison crowding or the ratio of security staff to offenders), basic needs are unsatisfied which provokes offenders to choose maladaptive behavior during incarceration. On the same token, the Situational Perspective argues that offender misconduct is based on temporal, environmental, and sociological circumstance. Aspects such as prison architecture, prison organization, and the social atmosphere between offenders and correctional staff influence how offenders perceive their situation, such as their level of safety. Although these theories may explain how prison architecture, facility layouts, and interior design is related to rehabilitation effectiveness, such theories may not be the sole factor when measuring rehabilitation outcomes.

According to recent findings from Morris and Worrall (2014) prison design was modestly associated with violent misconduct either directly or indirectly. Their research expressed a disassociation between prison architecture and officer-offender relationships. Progressive designs, such as campus and high-rise layouts, exhibited more positive relationships between offenders and correctional staff. For example, relationships between offenders and correctional officers in older units with substantial amounts of double cells were less positive. Potentially, newer and modern correctional facilities may influence prison environments and interactions.

Comparisons were made between prison design and offender suicides. Tartaro (2003) found non-significant relationships between design layouts, correctional staff supervision, and offender suicide. However, this might be due to other factors such as sufficient correctional officer training. A later study by Tartaro and Levy (2010) indicated that jail characteristics did not correlate with reported suicides directly; however, utilizing noninstitutionalized and progressive interior design reduced some suicide risk. Evidently, much can be found when studying architectural concepts; however, such research may reveal mixed results or an incomplete picture of direct or indirect correlations with rehabilitation efforts.

## RESEARCH RECOMMENDATIONS AND LIMITATIONS

Since uncovering multiple findings is likely, when measuring relationships between prison architecture, layouts, interior design, and rehabilitation/offender outcomes, it is imperative to accurately note what is being observed. Three research limitations should be taken into consideration when reviewing these studies. First, although there are loose connections between architecture and violent misconduct from the examples provided in this section, offender behavioral patterns do not illustrate a comprehensive picture of prison architectural concepts. Criminological topics including, but not limited to, recidivism, post-release employment, and other reentry outcomes should be considered when measuring rehabilitation effectiveness in new generation prisons. If newer facilities are constructed to emulate life outside of prison, then conducting post-release follow up studies is imperative to understanding prison architectural effectiveness (not solely behavioral variables during incarceration).

Secondly, thorough research requires controlling for factors not related to prison architectural concepts. Observing multiple variables, either directly or indirectly influencing rehabilitation efforts, require robust methods. Hence, variables such as treatment services and other facility resources should be compared when observing correctional facilities with progressive design characteristics. In doing so, researchers can determine how to weigh the effects of prison design on rehabilitation.

Lastly, this brief contains studies from correctional departments across the globe. Offender populations incarcerated in new generation prisons from one country will not be representative of offender populations in another country. Clearly defining which layout and interior design concept works with which offender population, is a crucial methodological standard for future prison architectural research. In other words, although innovative prison architecture is promising, selected designs must be generalizable and relevant to the offender population in question.

## **CONCLUSION AND IMPLICATIONS**

Some research limitations will exist regardless of robust methodologies. However, correctional departments encountered successful advances towards effective prison architecture. The literature illustrates how prison architecture evolved from design characteristics meant for control, surveillance, and security, to utilizing flexible and normalized spatial concepts for enhanced rehabilitation efforts. Furthermore, given the context from the studies, correctional departments throughout the international community experienced varying levels of progression towards new generation prisons. Older prison layouts are used less and replaced by increasingly progressive models; however, correctional needs and resources may greatly influence if or how rapidly older facilities are replaced.

Finally, regarding notable architectural advancement, some European countries are rigorously testing new generation prisons. Specifically, the Netherlands as well as Scandinavian countries, are prodigal examples of prison innovation and design. Correctional departments pursuing vigorous rehabilitation strategies may find valuable insight when collaborating with those countries. These correctional departments possess a sound understanding of the relationship between prison architecture and offender outcomes. However, it is still imperative to acknowledge the varying characteristics between offender populations. Sharing and integrating prison architecture ideas will only be effective if correctional decision makers and researchers carefully gauge their offender population. Regardless, new generation prisons show promise. At this stage of architectural research, it is just a matter of finding more correlations between spatial concepts, rehabilitation, and offender outcomes to expand our perspective of prison softening.

## APPENDIX A

Table 1 - China

### Architecture

Emphasizes tall, thick walls, barbed wire, and watchtowers

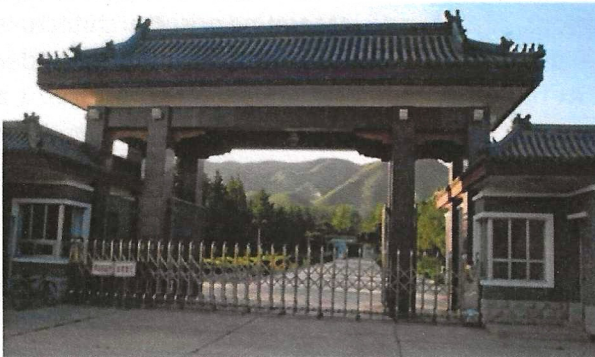
Facilities located in rural and mountain areas  
Only 40% of facilities located within 6.2 miles of a town or city

### Layouts

Small prisons – 1500 offenders  
Medium prisons – 1500 – 3000 offenders  
Large prisons – 3000+  
Mega prisons – 7000+

Mostly dormitories – 211 square feet  
Single offender cell – 55 square feet  
Few shared cells

### Example: Qincheng Prison



Built in accordance with the 1954 Reform  
Through Labor Regulations  
Divided into three sections

First section: Jail houses  
Includes both the jail houses for low-ranking prisoners and high-ranking prisoners

Second section: Management and Work for field labor

Third section: Residential section for employees such as wardens and their relatives.

Facility is between orchards, with farm land and fish pond in front. Orchards and fish ponds stretch across the grounds of this luxury prison

**Table 2 - U.K.**

**Architecture**

Past prison architecture considered poor health and environmental standards

29 Victorian jails in operation

Recent architecture influenced by 1990s security breaches

**Spatial Concepts**

Recently started creating spaces for personal change and reorientation for reentry

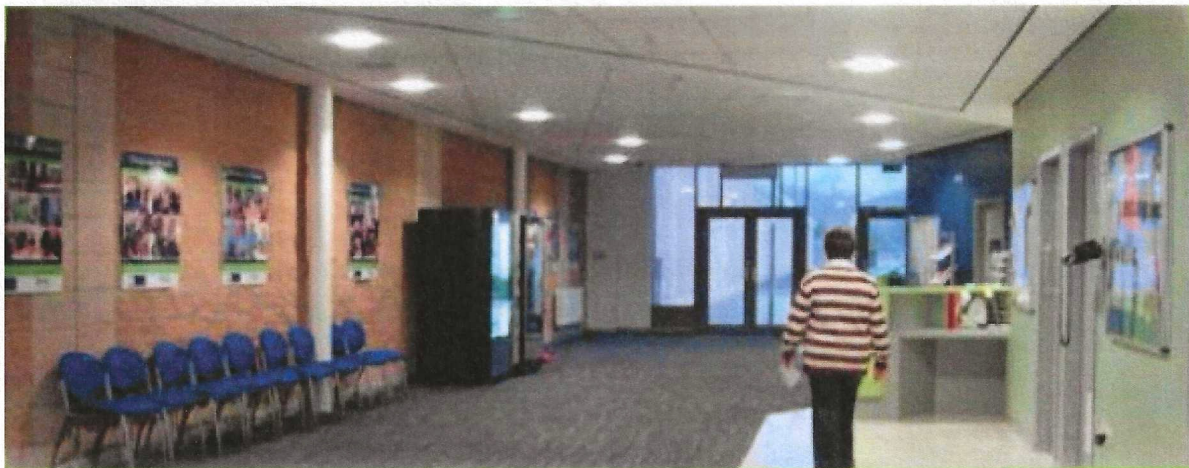
**Example: Her Majesty's Prison Forest Bank**



Cellular - single and double  
Divided into eight wings (A-H), a healthcare unit and a Care and Separation unit

Mostly single cells, with some double cells  
All the cells are designed to be safer  
No ligature points due to modularization being the method of construction

Sits in a country park with lake and meadows which are for public use



**Table 3 - Scandinavian Countries  
(Norway, Denmark, and Iceland)**

**Interior Design**

Stylized architecture both reducing environmental impact and emphasizing humane treatment

**Spatial Concepts**

Environments designed to rehabilitate with internal spaces comprised of furnishings, color zoning, natural light, artwork, and vistas

Space is normalized with open interiors, absence of hard fixtures, and access to outside space

**Example: Halden Prison**



Cells are 110 square feet and feature flat screen televisions, desk, mini-fridge, toilet with shower. 10-12 cells share a kitchen and living room equipped with a couch and video game system.

Grocery store where they can purchase food to cook, an activities house with jogging, soccer fields, a recording studio where inmates can make music, a library, a rock climbing wall and a chapel



Simulates a village

The hallways are tiled and have large photographs

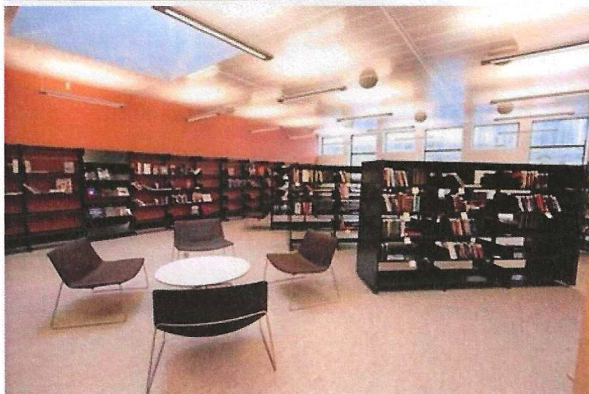
Exteriors are brick, steel and wood

Natural life including birch, blueberry and pine trees

No barbed tape, fences, towers or snipers

Guards use underground tunnels to move through the prisons

Staff are typically unarmed and frequently interact with inmates during meals and exercise



## Table 4 - Australia

### Architecture

Mirrored U.S. supermax designs

Adopted models such as the triangular podular design influenced Australian prison construction

Electronically monitored walls

### Layouts

Utilizes minimum, medium, and maximum facility layouts

Leader in design areas such as safe cell technology

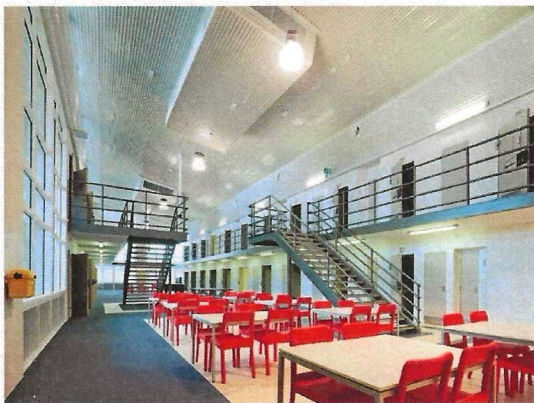
Progressive designs for female facilities

### Example: Hopkins Correctional Centre



Single, double, and cottage style accommodations

Colorful doors, energy efficient buildings, rain water is recycled to flush toilets



**Table 5 - Netherlands**

**Architecture**

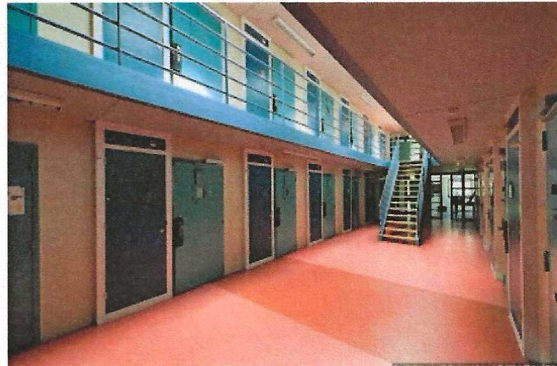
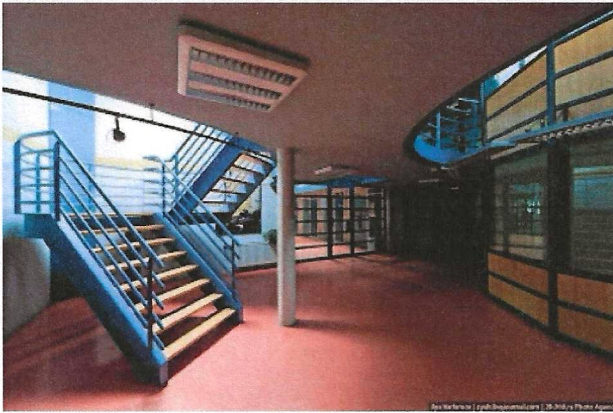
Used multiple design concepts throughout time

**Layouts**

Panopticon Layout  
Radial Layout  
High-Rise Layout  
Campus Layout  
Detention Concept Lelystad (DCL)

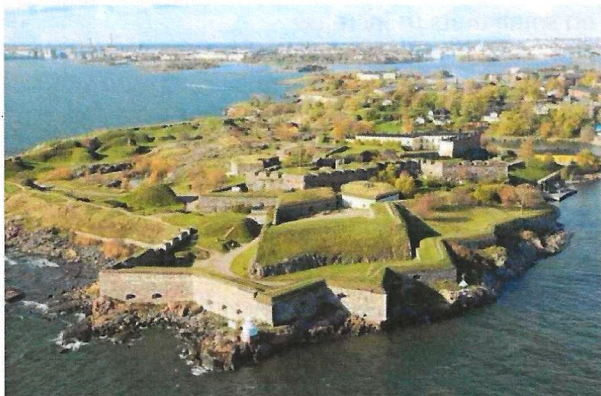
**Interior Design**

Access to technology and appliances to emulate regular activities, responsibilities, and daily routines outside of prison



## Table 6 - Finland

### Example – Suomenlinna Prison



Open prison with no cells or locked doors  
Single rooms with shared kitchens, toilets  
showers, saunas, flat screen televisions

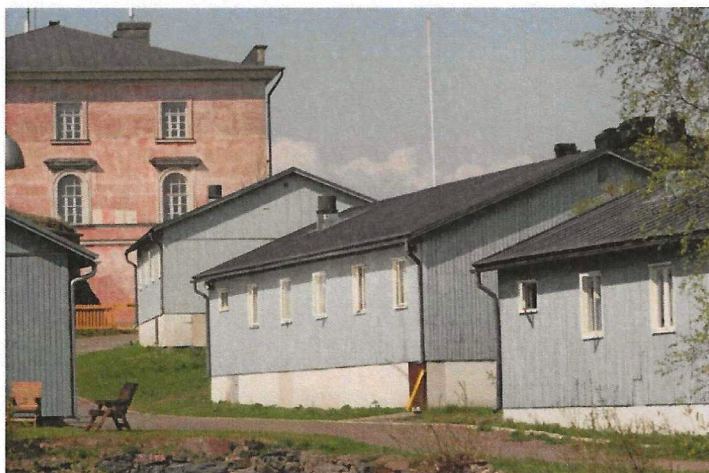
Located on a hilly, green island

No barb wire fences and prisoners are  
monitored through electronic surveillance  
system



Suomenlinna prison director Tapio Linatti in a communal kitchen: In some respects the accommodations are reminiscent of a youth hostel.

Photo: Tom Bird



**Table 7 – United States**

**Architecture**

Previous design penal regimes  
Now focuses on small units to increase  
offender-staff interactions

Facilities are closer to cities for greater access  
to services

**Layouts**

Utilized Auburn and Podular Layouts  
Innovative use of space for female facilities

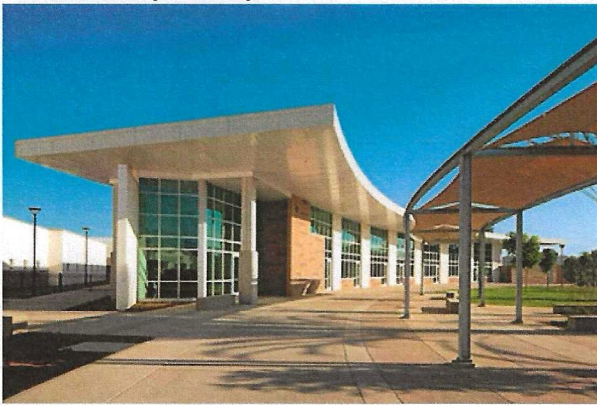
**Example – Las Colinas Woman’s Detention  
and Reentry Facility**

Space for academic, life skills, and vocational  
training

Recreation areas for dance, yoga, and  
meditation

Outdoor amenities include amphitheater,  
outdoor meeting spaces, walking paths, public  
art, and extensive landscaping

Design innovations include smaller-scale  
housing units grouped per detention levels that  
support programmatic needs of the inmate  
population.



Layout combines open space and landscaping  
amenities to create a campus-like environment  
Daylight and acoustic features are incorporated  
to increase natural daylight in living and work  
spaces



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