

Impact of Architectural Design on Prisoners' Well-being and Rehabilitation in the Netherlands.

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Abstract:

This thesis investigates how the design of prisons affects the rehabilitation of prisoners. It focuses on the Dutch prison system while drawing comparisons with Norway's progressive approach. The study analyzes how the environment within prisons affects the well-being of inmates and their potential for reintegration into society. It examines the impact of spatial layout, natural light, privacy, and rehabilitative resources on inmates' health, behavior, and recidivism.

The thesis proposes the "Netherlands Correctional System Reform Act," inspired by Norway's model. The act calls for prison designs that promote human dignity, rehabilitation, and community integration, aiming to transform the Dutch prison system to reduce recidivism and enhance public safety. The study underscores the potential of thoughtful architectural design in contributing significantly to criminal justice reform.

Keywords:

Rehabilitation, Prison Design, Spatial Limitations, Mental health

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1. Introduction

Imagine walking into a room that is only 10m² in size (Ministerie van Algemene Zaken, 2023). The walls are devoid of color, there are no windows, and a fluorescent light bulb above constantly buzzes. The air is stale, and the idea of being confined for hours or even a lifetime is unsettling. Unfortunately, this is the reality that many people face in prisons.

Prisons are often built with little regard for design and spatial requirements, let alone the operational, functional, and psychological needs of their inmates. Those who are incarcerated are often marginalized and neglected by society (Gaur, 2023). The design of prisons has raised a question about its significance, considering it appears to have little effect on individuals living in mainstream society. Why should architects be interested in prison design, and why is this important? In order to address these concerns, we need to analyze the architectural elements that contribute to the prison environment and evaluate how they affect the lives of inmates as well as the society outside the prison walls (Gaur, 2023).

In recent years, the discourse surrounding prison design has gained significant traction globally, reflecting a growing recognition of the profound impact architectural choices can have on prisoners' well-being and the overall efficacy of the criminal justice system. This discussion is particularly relevant in the Netherlands, where the current state of prison design stands as a focal point for examination and reform (Liebling et al., 2020). Drawing comparisons with Norway's renowned prison system, which has garnered international acclaim for its humane approach (Berger, 2016), underscores the need for critical evaluation and innovation within Dutch correctional facilities.

The Netherlands, known for its progressive policies and commitment to rehabilitation, faces a pivotal moment in reevaluating its approach to prison design (Schinkel, 2003). Despite advancements in certain areas, such as the promotion of restorative justice principles, the architectural landscape of Dutch prisons often falls short in prioritizing the well-being and rehabilitation of inmates (Schinkel, 2003). Conversely, Norway's success in fostering environments conducive to rehabilitation offers valuable insights into alternative models of incarceration that prioritize human dignity and reintegration (Berger, 2016).

Research has consistently demonstrated the correlation between environmental factors and inmate behavior, mental health, and rates of recidivism.¹ (Nurse, 2003). Therefore, the design of prisons must be approached with careful consideration of elements such as spatial layout, natural light, access to outdoor spaces, and opportunities for social interaction. All these play integral roles in fostering rehabilitation and reducing the likelihood of reoffending (Nurse, 2003).

Beyond individual well-being, the broader implications of prison design extend to societal attitudes toward justice and rehabilitation. The neglect and stigmatization of prisoners within society perpetuate cycles of incarceration and hinder efforts toward meaningful reform. By prioritizing humane design principles, policymakers and architects have the opportunity to challenge prevailing narratives surrounding punishment and retribution, advocating instead for a system that emphasizes accountability, rehabilitation, and societal reintegration.

This thesis will therefore answer the following main question: *"How does the architectural design of prisons in the Netherlands impact the well-being of prisoners and contribute to*

¹ The act of repeating an undesirable behavior despite negative consequences.

their rehabilitation and in what ways can we work towards a more humane punitive system?"
To answer this question as best as possible the thesis has been divided into six chapters:

The second chapter, "Origins and Evolution of Prison Design," provides a comprehensive review of the historical progression of prison architecture, noting the evolution of design principles over periods. It delves into key prison designs that have been pivotal and contrast them with the latest design practices found in the Netherlands.

The third chapter, "Norway's Model: A Case Study," covers the development of Norway's prison system, detailing its shift from punitive methods towards a focus on rehabilitation. It describes the unique features of Norway's community-based prison approach and concludes by discussing what makes the Norwegian model successful and how these insights could benefit the prison system in the Netherlands.

The fourth chapter, titled "Architectural Elements and Prisoner Rehabilitation," delves into how thoughtfully crafted and humane prison designs play a crucial role in the rehabilitation process. It identifies architectural features that contribute to this goal and examines their role in facilitating the reintegration of prisoners into society. Additionally, the chapter explores the significant impact these design elements have on the mental well-being of inmates.

The fifth chapter, "Spatial Limitations and Physical Health," examines the impact of spatial constraints in prisons on inmates' physical health and explores the implications for prison reform in the Netherlands. It offers research insights and recommends policy and architectural changes to improve prisoners' well-being.

The concluding chapter summarizes the research questions and findings, contemplating their impact on the future of prison architecture in the Netherlands. It issues a call to action for architects, policymakers, and society at large, urging a commitment to humane design principles in the pursuit of criminal justice reform.

2. Origins and Evolution of Prison Design

The design of prisons has changed over time due to shifts in societal attitudes towards punishment and rehabilitation, as well as broader historical, cultural, and political contexts. This chapter explores the complex history of prison design, tracing its origins from ancient civilizations to contemporary approaches. It examines influential typologies and draws comparisons with modern practices in the Netherlands (Hayner & Ash, 1940).

The origins of prison architecture can be traced back to ancient times, where detention was a crude and punitive practice (Geltner, 2006). Civilizations such as Mesopotamia and Egypt utilized confinement as a means of punishment, with dungeons and underground cells being the primary carceral spaces. The Roman Empire further developed these practices, constructing complex carceral structures known as *carceres*, characterized by labyrinthine layouts and austere conditions (Reid, 2023).

During the medieval period, various forms of incarceration were developed such as castles, fortified towers, monastic dungeons, and town jails. However, these early carceral structures were often oppressive, unsanitary, and intended to inflict punishment rather than facilitate rehabilitation (Geltner, 2006). However, with the emergence of religious orders such as the Franciscans and Dominicans, the concepts of penance and redemption started to have an impact on the design of prisons. As a result, proto penitentiaries were established somewhere between 1785 and 1822 with the aim of moral reform (Rubin, 2016).

During the Renaissance period, there were significant advancements in prison architecture. Humanist ideals of justice and rehabilitation influenced this development (Ackerman, 1954). The Enlightenment-era penal reformers, who drew inspiration from the works of philosophers such as Cesare Beccaria and John Howard, advocated for the establishment of institutions that focused on rehabilitating prisoners instead of punishing them. Consequently, the concept of the penitentiary was born (Draper, 2000).

During the 19th century, concerns about crime and social disorder arose due to industrialization and urbanization. This led to transformations in prison design, especially in the United States, where the penitentiary movement gained momentum. Its advocates, such as Benjamin Rush and Thomas Eddy, believed in reforming criminal behavior through solitary confinement and labor. In Europe, two influential models of prison discipline emerged during this period - the Auburn and Pennsylvania systems. Both systems had different approaches to inmate isolation and labor (Carson, 2011).

Throughout the 20th century, prison design underwent significant diversification, with architects experimenting with a wide range of typologies and philosophies (McWilliams, 2002). The emergence of modernist architecture in the early 20th century brought about a reevaluation of spatial planning and environmental psychology, leading to the development of open-plan prisons and therapeutic communities. However, the latter half of the century saw a return to more punitive approaches, characterized by the proliferation of supermax prisons and high-security complexes (Hancock & Jewkes, 2011).

The design of prisons has changed throughout history to reflect the societal norms of the time. In the past, prisons were seen as places of punishment, but over time, the focus has shifted towards rehabilitation. The prisons of the past were often crude and oppressive, but as society's views on justice and correction have changed, so have the designs of the prisons. Today, there is a greater emphasis on treating prisoners with dignity and respect and helping them to reintegrate into society. This is exemplified by modern practices, such as those in

Norway, which view imprisonment as a step towards reform and reintegration, rather than simply a form of punishment.

3. Norway's Model: A Case Study

Over the years, the Norwegian prison system has undergone significant evolution. In the past, like many other Western countries, Norway followed a punitive approach to criminal justice, mainly focusing on punishment and incapacitation. During the latter half of the 20th century, Norway began to reassess its approach to incarceration. It acknowledged the limitations of punitive measures in reducing recidivism and promoting societal reintegration (Denny, 2016).

The development of Norway's prison system can be traced back to the 1970s. During this time, policymakers and practitioners began experimenting with alternative approaches to imprisonment. The principles that emerged emphasized humanism and placed importance on the dignity and rights of individuals, even those convicted of crimes. As a result, Norway gradually shifted towards a more humane and rehabilitative model of corrections (Berger, 2016; Denny, 2016).

One of the key milestones in Norway's transition was the implementation of the Norwegian Correctional Services Act in 1981, which states that "a sentence shall be executed in a manner that takes into account the purpose of the sentence that serves to prevent the commission of new criminal acts, that reassures society, and that, within this framework, ensures satisfactory conditions for the inmates.", "there must be an offer to undergo a restorative process while the sentence is being served." And "in the case of persons remanded in custody, the Norwegian Correctional Service shall make suitable arrangements for remedying the negative effects of isolation" (The Execution of Sentences Act, 2001).

This act laid the groundwork for a more progressive and rehabilitative prison system. This legislation emphasized the importance of rehabilitation, reintegration, and respect for human rights within the correctional framework (Høidal, 2018).

A defining feature of Norway's prison system is the extensive use of community-based correctional facilities, such as open prisons and halfway houses. These facilities represent a departure from traditional closed institutions, offering a more relaxed and community-oriented environment where offenders can gradually reintegrate into society while still under supervision (Dugdale & Hean, 2021).

Norway has one of the lowest rates of recidivism with only 20% of people returning to prison after release. In the Netherlands, within two years, 47% of 29,329 released prisoners were re-convicted in 2015 (Van Ginneken & Palmen, 2022; Weijters et al., 2017).

Community-based prisons in Norway prioritize autonomy, responsibility, and accountability. Offenders residing in these facilities are encouraged to participate in work, education, and various rehabilitation programs during the day while returning to the facility in the evenings. This structure allows individuals to maintain ties with their families, communities, and employment networks, which are crucial for successful reintegration (Dugdale & Hean, 2021).

The prison cells in Norway, with their dimensions spanning 8 to 10 square meters, stand out for both their ample space and the quality of their furnishings—a characteristic shared with

cells in the Netherlands, according to the European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT, 2019). This similarity extends beyond just dimensions; the aesthetic and functional aspects of the cells in both countries are remarkably alike, as illustrated in Figures 1 and 2. This uniformity underscores a broader commitment to ensuring that incarceration spaces are not only secure but also provide a humane environment conducive to rehabilitation (Norway: Prisons in 2023, 2023).



Figure 1: Prison cell in Norway (Kofman, 2015)



Figure 2: Prison cell in the Netherlands (Stichting Antwoord, 2022)

Given the striking resemblance in cell design between Norway and the Netherlands, the key to Norway's successful prison system lies not in the physical environment of the cell but in its foundational approach towards rehabilitation (Dugdale & Hean, 2021). For the Netherlands to mirror this success, a shift is essential, moving away from punitive strategies to embrace rehabilitation at its core. This transition involves adopting evidence-based practices that address the underlying reasons for criminal behavior. By investing in a broad range of support services, including educational opportunities, vocational training, substance abuse programs, and mental health care, the Netherlands can equip its incarcerated population with the necessary tools and skills for successful reintegration into society post-release (Nurse, 2003).

Central to Norway's rehabilitative approach is the concept of an individual care plan (ICP) tailored to the specific needs and circumstances of each offender. Recognizing that no two individuals are alike, Norwegian correctional authorities assess the risks and needs of offenders upon entry into the system and develop personalized rehabilitation plans accordingly (Harsløf et al., 2019). This personalized approach ensures that interventions are targeted and effective, maximizing the likelihood of successful reintegration (Dugdale & Hean, 2021).

For the Netherlands prison system to mirror this aspect of Norway's model, it must prioritize the development and implementation of individualized treatment plans for all incarcerated individuals. By conducting comprehensive assessments of offenders' criminogenic needs, including factors such as substance abuse, mental health, education, and employment history, the Netherlands can tailor interventions to address the specific challenges faced by each individual. This personalized approach can lead to better outcomes and ultimately contribute to lower rates of recidivism (Harsløf et al., 2019).

Norway's extensive use of community-based correctional facilities, such as open prisons and halfway houses, has been instrumental in promoting successful reintegration and reducing recidivism. These facilities provide a structured yet supportive environment where offenders can gradually transition back into society while still under supervision. By allowing individuals to maintain connections with their communities, families, and employment opportunities, these facilities facilitate the development of prosocial behaviors and support networks (Harsløf et al., 2019).

Osterøy, known as the Prison Island, showcases a rehabilitation-focused design. This Norwegian facility emphasizes treating inmates with dignity, offering residential-style living, vocational training, and recreational activities within a community-like setting. Such an approach fosters personal responsibility, skill development, and psychological well-being, crucial for successful societal reintegration. In Figures 3 and 4, the prison layout difference between the traditional approach and the one adopted by Osterøy is shown.

The Netherlands prison system can learn from Osterøy's emphasis on creating environments that mimic real-life situations, thus preparing inmates for life post-release. Investing in educational and vocational training programs equips inmates with essential skills for employment, while promoting dignity and respect can significantly improve rehabilitation outcomes. Osterøy's model suggests that focusing on development over detention not only benefits inmates but also contributes to societal safety and cohesion.



Figure 3: Osterøy, Prison Island (Prasgun, 2017)



Figure 4: Prison in Roermond, the Netherlands (Webmaster, 2021)

The transformation of Norway's prison system from a punitive to a rehabilitative model offers valuable insights for countries like the Netherlands. By emphasizing human dignity, personalized rehabilitation plans, and community-based facilities, Norway has achieved one of the lowest recidivism rates globally. This approach not only aids in the successful reintegration of offenders into society but also enhances public safety. The Netherlands, with its similar cell design yet higher recidivism rates, can learn from Norway's emphasis on rehabilitation, individual care plans, and the utilization of facilities like Osterøy that blend security with a focus on development and dignity. Adopting these principles could lead to a more humane and effective correctional system, reducing recidivism and fostering a safer, more integrated society.

4. Architectural Elements and Prisoner Rehabilitation

The architectural design of prisons serves as a foundational element in shaping the experiences of incarcerated individuals. Well-planned and humanitarian prison designs prioritize the principles of dignity, safety, and rehabilitation, aiming to create environments that foster positive behavior change and support prisoners in their journey toward reintegration into society.

Designs for humanitarian prisons aim to create an environment that closely resembles the conditions in the community, while at the same time considering the constraints of incarceration. The goal is to promote autonomy, agency, and a sense of normalcy among prisoners, which can help alleviate the dehumanizing effects of imprisonment and create spaces that encourage rehabilitation (Engstrom & Van Ginneken, 2022).

The following several key architectural elements contribute to the effectiveness of prison designs in promoting rehabilitation and reintegration (St John et al., 2019) (Engstrom & Van Ginneken, 2022):

Natural Light and Ventilation: Access to natural light and fresh air has been shown to have a positive impact on mood, cognitive function, and overall well-being. Incorporating windows, skylights, and outdoor spaces into prison designs can enhance the physical and psychological health of incarcerated individuals, reducing stress and promoting a sense of connection to the outside world (Bedrosian & Nelson, 2017).

Privacy and Dignity: Respect for privacy and dignity is essential for maintaining a sense of self-worth and promoting positive relationships among prisoners and between prisoners and staff. Design features such as single-occupancy cells, en suite bathrooms, and personal storage areas uphold prisoners' dignity and support their psychological well-being (Saxena & Hanna, 2015).

Therapeutic Environments: Creating environments that support rehabilitation and therapy is crucial for addressing the underlying causes of criminal behavior. Dedicated spaces for counselling, educational programs, vocational training, and recreational activities enable prisoners to engage in constructive pursuits and develop pro-social skills necessary for successful reintegration into society (Nurse, 2003).

Accessibility and Mobility: Ensuring accessibility for individuals with disabilities promotes inclusivity and equal opportunities for participation in rehabilitative activities. Designing facilities with barrier-free access, adaptable furniture, and assistive technologies accommodates the diverse needs of incarcerated populations and fosters a sense of belonging and empowerment (Persson et al., 2014).

Well-designed prison facilities play a critical role in facilitating the successful reintegration of prisoners into society upon release. By providing opportunities for education, vocational training, and social support, these facilities equip individuals with the skills and resources necessary to lead law-abiding and productive lives post-incarceration.

Moreover, by maintaining connections with family, friends, and community support networks, well-planned prison designs strengthen prisoners' ties to their communities and reduce the likelihood of recidivism. By promoting positive social interactions and fostering a

sense of belonging, these facilities contribute to the rehabilitation and reintegration of individuals back into society, ultimately enhancing public safety and community well-being (Harsløf et al., 2019).

Architects should consider not designing a building but a community like Osterøy's prison island. Communal spaces and access to nature promote a sense of connection to the outside world and mitigate feelings of confinement. Additionally, amenities such as libraries, gyms, and outdoor recreation areas provide opportunities for relaxation, self-expression, and personal growth, supporting prisoners' mental health and emotional resilience.

Architects are often visual thinkers. To enhance their ability to conceptualize and communicate their designs, AI-generated visuals are increasingly being used. These tools provide dynamic and detailed representations, enabling architects to thoroughly explore and refine their ideas. Refer to Figure 5 for a visual representation of a community-like prison. The prompt is: "Create an image inspired by the concept of a "Norway ethical prison island." This island is designed to embody the principles of dignity and rehabilitation that are central to Norway's innovative approach to incarceration. Instead of conventional prison buildings, envision small, cabin-like structures scattered throughout the island, blending with the natural environment. These cabins are modern and modest, emphasizing rehabilitation over punishment. There are areas designated for agriculture, where inmates can work with the land, and open spaces for recreation and reflection. The overall atmosphere of the island is peaceful, promoting healing and positive transformation."



Figure 5: AI-generated image (DALL-E, 2024)

The evolution of prison design underscores the necessity of environments that prioritize rehabilitation. Architects are encouraged to conceptualize these spaces not merely as places of confinement but as communities that foster growth, healing, and reintegration. Inspired by models like Norway's ethical prison islands, the emphasis shifts towards designing spaces that blend with nature, offer privacy, and provide access to rehabilitation programs, education, and vocational training. Such designs should encourage connections with the outside world and support mental health through natural light, communal spaces, and opportunities for personal development.

However, the impact of architecture extends beyond the physical environment. Comprehensive mental health services must complement these designs to address the complex needs of incarcerated individuals fully. By crafting spaces that are more akin to supportive communities than traditional prisons, architects can play a crucial role in the rehabilitation process, ultimately contributing to reduced recidivism and enhanced community well-being. This holistic approach emphasizes that successful reintegration begins with the foundational concept of designing not just a building but a community.

5. Spatial Limitations and Physical Health

Overcrowded prison environments, lack of access to natural light, and limited recreational spaces can have negative impacts on both physical and mental health, making rehabilitation more complicated (Warmesley, 2005). To improve this, it is important to rethink prison design and not just view them as holding facilities. Instead, they should be seen as spaces with potential for rehabilitation. Increasing cell sizes from the standard cramped dimensions to more spacious ones is a promising strategy. Such changes could lead to improved mental health outcomes, reduced aggression, and enhanced opportunities for education and personal development. By prioritizing humane living conditions, the goal shifts towards supporting rehabilitation and reducing recidivism, paving the way for a future where the design of prison environments significantly contributes to societal safety and individual reform.

Designing prisons presents inherent challenges due to spatial limitations. Overcrowding, lack of access to natural light, insufficient ventilation, and restricted recreational spaces are common issues encountered in carceral environments worldwide (Crewe et al., 2013). These constraints not only compromise the physical health of inmates but also contribute to heightened levels of stress and mental health disorders, creating an environment that hinders rehabilitation efforts (Simpson et al., 2019). The absence of proper ventilation and natural light exacerbates these health problems, leading to a cycle of declining well-being and increased susceptibility to illnesses (Farrington & Nuttall, 1980).

In the Netherlands, there is an urgent need to reform the prison system to address the negative impact of limited space on the health of inmates (Kerkhof & Bernasco, 1990). Various initiatives are being taken to reduce overcrowding, improve living conditions, and focus more on rehabilitation (Ministerie van Algemene Zaken, 2024). However, implementing these reforms is challenging due to bureaucratic obstacles and resistance from those who strongly believe in punitive measures. This highlights the complexity of bringing about systemic change (O'Grady et al., 2011).

Norway's approach to prison design is considered progressive and inspiring for carceral reform. Their prisons, especially Halden Prison, are known for their innovative architectural strategies that prioritize the well-being and rehabilitation of inmates (Berger, 2016) (Nurse, 2003). As outlined above spacious living quarters, access to natural light, communal areas, and vocational training programs are integral components of these designs, promoting dignity, autonomy, and purpose among incarcerated individuals (Abdel-Salam & Kilmer, 2022). Studies have also shown that these design elements contribute to lower recidivism rates and better outcomes, highlighting the effectiveness of a rehabilitative approach in prisons (Berger, 2016) (Denny, 2016) (Dugdale & Hean, 2021).

What would happen if a cell size will increase from 10m² to 15m² or even 20m²?

Larger prison cells could offer a variety of benefits to inmates. Firstly, more space would allow for greater movement and exercise, which is important for mitigating the negative health effects of a sedentary lifestyle such as obesity, cardiovascular disease and musculoskeletal problems. Secondly, the psychological benefits of increased personal space are well-documented. A larger living space can reduce feelings of confinement, lower stress and anxiety and even

decrease rates of depression, which can in turn improve physical health by reducing somatic symptoms like chronic pain and gastrointestinal issues (Fazel et al., 2016).

Thirdly, overcrowding in prisons can lead to increased violence and aggression. More spacious cells can help reduce tension and conflicts between cellmates, leading to a safer environment for both inmates and prison staff (Fazel et al., 2016). Fourthly, larger cells would enable better hygiene practices and more effective spatial separation, which is particularly important in controlling the spread of infectious diseases, such as tuberculosis and influenza.

Lastly, providing more space in prisons can lead to the inclusion of additional educational and rehabilitative resources, such as books, work materials, and even computers for distance learning. Furthermore, well-planned prison designs could create rooms similar to those found in Norwegian prisons, which enable inmates to maintain connections with their families, friends, and community support networks. This can greatly improve the mental health of prisoners (Harsløf et al., 2019).

Policies can alter the spatial confinement of cells. Therefore, any changes to improve the prison system must prioritize addressing overcrowding, enhancing living conditions, and promoting rehabilitation. To achieve this, architectural interventions should focus on maximizing spatial efficiency, enhancing access to natural light and ventilation, and integrating therapeutic and vocational programs (Engstrom & Van Ginneken, 2022) (MacDonald, 2018).

The transformation of prison environments from overcrowded and bleak spaces to ones that prioritize inmate well-being and rehabilitation is not just an ethical imperative but also a practical necessity. By reimagining cell sizes and integrating design elements that encourage physical activity, mental health, and educational opportunities, we can potentially improve individual outcomes and enhance societal safety. These changes reflect a broader shift towards recognizing the rehabilitative role of prisons. It underscores the belief that effective rehabilitation contributes to reducing recidivism and building stronger, safer communities. Through these reforms, the architecture of incarceration can evolve to support a more humane and effective approach to correctional policy and practice.

6. Conclusion (possible outcome)

The critical role of architectural design in the rehabilitation of prisoners and its potential to foster a more humane criminal justice system are explored in this study. Focused on the Dutch context and incorporating insights from Norway's progressive approach, the comparison between these systems underscores a fundamental truth: the environment in which prisoners are incarcerated profoundly influences their rehabilitation journey and, ultimately, their successful reintegration into society.

The presented evidence highlights the importance of rethinking prison design, not just as an architectural task, but as a crucial element of criminal justice reform. The Norwegian model prioritizes the dignity, rehabilitation, and successful reintegration of prisoners, which can serve as a useful framework for transforming the Dutch prison system. This approach suggests that creating environments that value human dignity, autonomy, and community connection can significantly reduce the rate of repeat offences and improve public safety.

To promote a more effective and humane correctional system in the Netherlands, the following legislation is proposed, taking inspiration from Norway's Execution of Sentences Act:

The Netherlands Correctional System Reform Act

This Act mandates that:

1. Execution of Sentences: A sentence shall be executed in a manner that:
 - Acknowledges the sentence's purpose of preventing new criminal acts.
 - Reassures society through visible efforts towards rehabilitation.
 - Ensures satisfactory conditions for the inmates, prioritizing their physical, mental, and emotional well-being.

2. Restorative Process: Every individual under incarceration must be offered the opportunity to engage in a restorative process during their sentence. This process aims to address and mitigate the harms caused by the criminal act, facilitating healing for both the victim and the offender.

3. Individual Care Plan: Upon entry into the correctional system, an individual care plan will be developed for each inmate, tailored to their specific needs and circumstances. This plan will focus on rehabilitation, skill development, and preparation for reintegration into society.

4. Design of Correctional Facilities: Prisons shall be designed following the "campus model," creating environments that resemble communities rather than traditional prison buildings. These facilities will feature:
 - Residential-style accommodations that offer privacy and dignity.
 - Spaces for education, vocational training, and therapeutic services.
 - Communal areas for social interaction and leisure activities.
 - Access to outdoor spaces and nature, promoting physical health and psychological well-being.

This legislation represents a paradigm shift in the approach to incarceration, recognizing the inextricable link between the physical environment of prisons and the rehabilitative process.

By adopting principles that emphasize dignity, individual care, and a connection to the community, the Netherlands can foster a more humane and effective correctional system.

The architectural design of prisons is not merely about the physical structures that house inmates but about creating environments that support human dignity, rehabilitation, and societal reintegration. This thesis contributes to the ongoing discourse on criminal justice reform, highlighting the pivotal role of architecture in shaping the future of incarceration. It calls upon architects, policymakers, and society at large to embrace a vision for prisons that are not places of mere confinement but communities that offer hope, healing, and a pathway back to society. Through such transformative approaches, we can build a more just, humane, and safe society for all.

7. Discussion

This thesis aims to compare the prison systems of Norway and the Netherlands, with a specific focus on how architectural design can impact the rehabilitation and reintegration of prisoners. By examining these two models, which are known for prioritizing the well-being of inmates, this work highlights the importance of creating humane prison environments. However, it's worth noting that the study's limited scope, which only looks at Norway and the Netherlands, means that it does not consider broader factors such as security levels and different approaches to corrections worldwide.

The image generated by AI (figure 5) to provide architects with a visual representation is designed with low security in mind. The designed environment gives a Nordic aesthetic, imparting a sense of calmness. However, this effect varies by location.

It is worth noting that by focusing only on low-security contexts in countries that are leading in correctional well-being, the thesis limits its applicability. Different security levels present unique challenges in finding the balance between safety and rehabilitation, which is not addressed in this thesis. This oversight hinders the understanding of how higher-security prisons can incorporate rehabilitative design while maintaining safety.

Moreover, the thesis's recommendations, although insightful for similar progressive systems, may not be directly applicable to jurisdictions with different socio-political environments, resource availabilities, and correctional traditions. To gain a more comprehensive understanding of the potential for architectural design to impact rehabilitation across diverse correctional settings, it is necessary to conduct a broader analysis, encompassing various countries and security levels.

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Figure 1

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Figure 4

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Figure 5

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