Prison Architecture and Its Impact on Different Aspects of Quality of Prison Life*

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Intersection between prison architecture and experience and behaviour of persons living and working in prison environment is one of important issues in penal research and policy. When prison is understood as a socio-material construct then the central issues relate to how architecture is experienced, how it communicates with people using the prison space and how those experiences impact life in prison. There is solid scientific evidence regarding the consequences design of prison buildings have on different aspects of quality of prison life, although the relationship between them is believed to be underexplored. In this paper, different aspects of the quality of prison life and the impact prison architecture has on them are outlined. It is believed that dimensions of the quality of prison life such as harmony, security, conditions and family contact, wellbeing and development, are influenced by the design choices regarding the correctional facility environment, exterior and interior elements of a prison building. Ideation, planning and construction of future and modification of existing prisons may benefit from integrating findings on relationship between humane prison architecture and behaviour and wellbeing of prisoners and correctional staff.

KEYWORDS: prison architecture / quality of prison life / design of prison space

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Introduction

The prison layout, interior and objects in a prison cell could be expected to have great impact on human senses and living conditions of persons residing in correctional facilities. These spatial, temporal and metaphysical conditions are, after all, the execution of the punishment. As James states "the designed objects and interiors represent and speak the language of punishment however 'normal' they may be" (James, 2018, p. 154). A special philosophical attitude about punishment and its perception by society in a given time, is woven in the prison architecture and the internal organisation of the prison (Jewkes, 2018; Johnston, 2000).

Since most prisons are closed facilities, the outlook and design of a prison building and objects inside and outside of it, has an immense impact on the living and working conditions within them. Recognizing the importance of these issues, scholars introduced the "carceral geography", as a subdiscipline with the goal to describe the nature and meaning of physical prison space (Moran, 2013a; Moran et al., 2017) and how spatial features of a building are intentionally arranged to affect particular behaviour and emotions (Adey, 2008).

There is a solid scientific research base regarding the impact design of prison buildings has on different aspects of life in prisons, although the relationship between them is believed to be underexplored (Engstrom & Van Ginneken, 2022). The general objective of this paper is to review the existing theoretical insights and empirical studies in order to outline the impact prison architecture has on some aspects of quality of prison life. Harmony, security, conditions and family contact, wellbeing and development (Liebling et al., 2012) are influenced by the design choices regarding the correctional facility environment, exterior and interior elements of a prison building.

Some Aspects of Quality of Prison Life
Affected by Prison Architecture

Prison architecture refers to buildings, interiors and other physical installations, as well as the outdoor of these buildings, yards, green surfaces, pathways etc. Some researchers indicate that prison is a socio-material construct drawing attention to how architecture is experienced, how it communicates with the people inside, and in this way affects the prisoners (Fransson, 2018). The importance of the prison architecture is outlined in regard to several dimensions of quality of prison life developed by Alison Liebling, Susie Hulley and Ben

Crewe (2012) that relate to harmony, security, conditions and family contact, and well-being and development.[2]

Harmony

The *harmony* encompasses various aspects of the treatment and environment within the prison setting such as entry into prison, respect and courtesy, staff-prisoner relationships, humanity, decency, care for the vulnerable, help and assistance (Liebling et al., 2012). These aspects could be significantly under the impact of the architectural design of a prison. Some research indicates that correctional facilities with a campus layout consisting of small units with a direct line of sight have a positive effect on staff-prisoner relationships (Fairweather, 2000; Johnston, 2000; Wener, 2000). Several studies specify that professional and non-professional prison users (prisoners, uniformed and un-uniformed staff, visitors etc.) favour small units in which close staff-prisoner relationship can develop (Beijersbergen, 2014; Beijersbergen et al., 2016). Another research in Dutch prisons found that prisoners in panopticon layouts were least positive about their relationships with officers. Prisoners in radial, courtyard, rectangular, and high-rise layouts had an increasingly positive judgement about officer-prisoner relationship (Beijersbergen, 2014).

Security

The *security* reflects those aspects of a prison's environment concerned with the rule of law and the proper use of authority, the regulation of behaviour, and the provision of safety (Liebling et al., 2012) and could be under the influence of the decisions made in relation to building architecture. Personal safety is of primary importance for prisoners, staff and other prison users, and its statutory provision is a basic duty of prison authorities. The security-promoting design includes single rooms, 24-hour access to the room or cell with lockable doors, increased visibility of all areas, and staff presence in inmate areas. But the issue of security in prisons is often confined with the purpose for resocialization and reintegration of prisoners. James (2018) argues that the dominant penal ideologies are manifested through the physical ambient of the prison interior that indicates deep distrust for inmates. He points out that interior design is manufactured in a way that puts a person in a position where he/she is always surveyed and controlled, labelling them as a constant risk for violence and vandalism. The tension between designing for security or comfort/function is not purely an

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[2] There is also the fifth dimension of quality of life named *professionalism* which addresses competences and conduct of prison staff, the predictability and fairness of prison rules and procedures, but it was extracted from analysis due to inability to relate it to prison design characteristics.

ideological issue. Introducing comfortable furniture, for example, with different mechanisms may create an opportunity for violence, towards staff, other inmates or oneself. Nevertheless, the tendency to design prison space predominantly for the worst-case scenario will deprive inmates of autonomy and contribute to further stigmatization (Ulrich et al., 2012).

Regarding the violence and misconduct in prisons some researchers argue that prisons with bright interiors regarding colours, absence of bars, comfortable furniture manifested less riots and vandalism (Wener & Olsen, 1980). On the other hand, research also indicates that older telephone pole layouts experience less misconduct than some modern prison building design (Morris & Worral, 2010). Another study demonstrates there are higher rates of violent assaults in panopticon, radial and high-rise prisons than in rectangular buildings (Beijersbergen, 2014). Uncomfortable living conditions in prisons, such as inadequate temperature, are connected to higher rates of violence (St. John, 2020).

Conditions and Family Contact

Conditions and family contact encompass prison living conditions and opportunities for maintaining family relationships (Ilijić et al., 2024). Appropriate architectural design of spaces for sleeping, reading, studying, dining and exhibiting other activities in prison can greatly influence the quality of living conditions for inmates. It is important for prison building users to have plumbing, electrical, and mechanical systems in good operating condition (Engstrom & Van Ginneken, 2022). Unreliable facilities can create unnecessary disruptions to daily life and undermine morale throughout an institution (St. John, 2020). So is the case with spaces designated for visitation, since some research suggests that the visitation rooms that are too small, without adequate heath, cooling, place to sit and are uncomfortable in general, send a message of neglect and disregard toward this important part of prisoners' life (Comfort, 2003).

Well-being and Development

Well-being and development cover various aspects of prison moral and social climate (Ilijić et al., 2024), prisoners' perceptions of their own well-being, capacity to act autonomously, levels of support for their personal development, and help with progression (Liebling et al., 2012). Various prison design characteristics are believed to relate to wellbeing and development. Persons in a prison environment could experience anonymization, isolation, desocialization, loss of identity and relationship, physical and mental health deterioration. Engstrom and van Ginneken (2022) introduce the term "ethical prison architecture" which relates to the personal living and general prison space elements that can influence prisoners` wellbeing. Adequate natural or artificial

lighting (Figueiro et al., 2011; Kim & Kim, 2007), view outside the cell and prison building (Barton & Pretty, 2010; Clearwater & Coss, 1991), noise (Jacobson et al., 1989; Stansfeld & Matheson, 2003), aesthetic of the space (Jewkes & Moran, 2017; Papanek, 1995; Sloan, 2012), prison layout (Liebling, 2002; Wortley, 1996), size of building and cell (McCain et al., 1976; Paulus, 1985), age of prison (Shefer & Liebling, 2008), comfortable visitation spaces (Bales & Mears, 2008; Comfort, 2003; Moran, 2013a, 2013b), nature in prison environment (Ulrich, 2002) could play a role in improvement or deterioration of inmates wellbeing. Aesthetic architectural solutions, such as cage-like cells with indestructible and uncomfortable furniture, could carry a potential message to the convicts that they are vandals, and that society does not trust them. Attractiveness of the space can ease the time serving in prison and communicate the message of value and respect to prisoners (St. John, 2020). Prisons should strive to improve their capacity for successful implementation of treatment and rehabilitation programs by creating a positive social climate in the prison and establishing architectural designs that aesthetically inspire hope for both prisoners and professional staff (Ilijić, 2021).

Conclusion

The connection between the spatial features of the prison environment and various dimensions of quality of prison life is empirically confirmed through multiple scientific studies. Arrangement of objects inside the space, as well as the visage outside of the prison, influence the experience and behaviour of incarcerated persons and working people. However, we should also mention some notions that suggest that design of prison interior and exterior does not have such an impact on life in prisons. Researchers argue that investing in improvement of prisoners-staff relationship, consistent and fair rules in prison have more impact on violence and uprisings in prison than the building design and layout (Useem & Goldstone, 2002).

This study has several limitations that could also serve as directions for future research. First, selected dimensions are not overall exclusive and greatly overlap. For example, prisoner staff-relationships are sometimes believed to be a part of a prison social climate, and personal security indication of prisoners` wellbeing. Therefore, this list is not definite or extinguished but serves the purpose of outlining the main ideas regarding the connection between architecture and quality of prison life. Second, insights regarding the correctional facilities design and quality of prison life usually present the experiences of adult male offenders. Hence the understanding of the influence architectural factors has on different categories of inmates (women, children, disabled people, elderly etc.) would greatly benefit the field of research. Moreover, the paper is primarily focused on inmates' experience, while the prison staff working and living conditions and their

relations to architectural features of the prison are absent.[3] Fourth, future line of thought could revolve around directions, magnitude and interactions of different design features and how they combine to create more positive prison environment.

In the end what are the lessons learned from the explorations of these relations in penology and penal policy in the country? What is the role of the architect in the process of building a venue for social deviants, and is this venue supposed to be eye pleasing, comfortable and enjoyable? Answers to these questions are obviously multifaceted and require researchers and practitioners to be careful when discussing the issue in question. Dominant approaches in penal ideology and policy, and public opinion on crime and punishment are reflected in the design of correctional facilities. But if there is scientific confirmation on the benefits that a carefully planned prison environment has on the living and working conditions of inmates and staff alike, then creating a more humane prison interior and exterior setting could contribute to the rehabilitation and reintegration as the purpose of punishment. Thinking about the future of prison architecture, there are already initiatives to implement more multidisciplinary (criminology, penology, urbanism, sociology), participative (planners, architects, prison administration) and inclusive (prisoners and staff) approach to planning and creating the prison environment that will improve working and living conditions for every person residing, working or visiting the correctional facility.

Acknowledgment

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[3] For further reading see Keinan & Malach-Pines, 2007; Liebling et al., 2011; Morgan et al. 2002.

References

Adey, P. (2008). Airports, mobility and the calculative architecture of affective control. *Geoforum*, *39*(1), 438–451 https://doi.org/10.1016/j.geoforum.2007.09.001

Bales, W. D., & Mears, D. P. (2008). Inmate social ties and the transition to society: Does visitation reduce recidivism? *Journal of Research in Crime and Delinquency*, *45*(3), 287–321 https://doi.org/10.1177/0022427808317574

Barton, J., & Pretty, J. (2010). What is the best dose of nature and green exercise for improving mental health? A multi-study analysis. *Environmental Science and Technology*, *44*(10), 3947–3955. https://doi.org/10.1021/es903183r

Beijersbergen, K. A. (2014). *Procedural justice in prison: A study on determinants and consequences of a procedurally just treatment of prisoners*. [Doctoral Thesis]. Vrije Universiteit Amsterdam

Beijersbergen, K. A., Dirkzwager, A. J. E., van der Laan, P. H., & Nieuwbeerta, P. (2016). A social building? Prison architecture and staff–prisoner relationships. *Crime & Delinquency*, *62*(7), 843–874. https://doi.org/10.1177/0011128714530657

Clearwater, Y. A., & Coss, R. G. (1991). Functional esthetics to enhance wellbeing. In A. A. Harrison, Y. A. Clearwater & C. P. McKay (Eds.), *From Antarctica to outer space* (pp. 331–348). Springer

Comfort, M. (2003). In the tube at San Quentin: The "secondary prisonization" of women visiting inmates. *Journal of Contemporary Ethnography*, *32*(1), 77–107. https://doi.org/10.1177/0891241602238939

Engstrom, K. V., & Van Ginneken, E. F. (2022). Ethical prison architecture: A systematic literature review of prison design features related to wellbeing. *Space and Culture*, *25*(3), 479-503. https://doi.org/10.1177/12063312221104211

Fairweather, L. (2000). Does design matter? In L. Fairweather & S. McConville (Eds.), *Prison architecture: Policy, design and experience*. Architectural Press.

Figueiro, M. G., Brons, J. A., Plitnick, B., Donlan, B., Leslie, R. P., & Rea, M. S. (2011). Measuring circadian light and its impact on adolescents. *Lighting Research & Technology, 43*(2), 201–215. https://doi.org/10.1177/1477153510382853

Fransson, E. (2018). The Lunch table. Prison Architecture, Action-forces and the Young Imprisoned Body. In E. Fransson, F. Giofrè, & B. Johnsen (Eds.) *Prison, Architecture and Humans* (177-199). Cappelen Damm Akademisk

Ilijić, Lj. (2021). Zatvorska socijalna klima: pojam, faktori i značaj zatvorske socijalne klime. *Zbornik Instituta za kriminološka i sociološka istraživanja*, *40*(2–3), 59–76. https://doi.org/10.47152/ziksi202123024

Ilijić, Lj., Pavićević, O., & Milićević, M. (2024). *Well-being in prison: The Case of Serbia*. Institute of Criminological and Sociological Research. https://doi.org10.47152/PrisonLIFE.D4.1

Jacobson, C., Jacobson, J., & Crowe, T. (1989). Hearing loss in prison inmates. *Ear and Hearing*, *10*(3), 178–183.

James, F. (2018). "It's important to not lose myself" Beds, Carceral Design and Women's Everyday Life within Prison Cells. In: Fransson, E., Giofrè, F. & Johnsen, B. (Eds.) *Prison, Architecture and Humans* (pp. 151-176). Cappelen Damm Akademisk

Jewkes, Y. (2018). Just design: Healthy Prison and the Architecture of hope. *Australian & New Zealand Journal of Criminology*, *51*(3), 319–321. https://doi.org/10.1177/0004865818766768

Jewkes, Y., & Moran, D. (2017). Prison architecture and design perspectives from criminology and carceral geography. In A. Liebling, L. McAra & S. Maruna (Eds.), *Oxford handbook of criminology* (pp. 541–561). Oxford University Press

Johnston, N. (2000). *Forms of Constraint. A History of Prison Architecture*. University of Illinois Press, Champaign.

Keinan, G., & Malach-Pines, A. (2007). Stress and burnout among prison personnel: Sources, outcomes, and intervention strategies. *Criminal Justice and Behavior, 34*(3), 380–398. https://doi.org/10.1177/0093854806290007

Kim, S., & Kim, J. (2007). The effect of fluctuating illuminance on visual sensation in a small office. *Indoor and Built Environment*, *16*(4), 331–343. https://doi.org/10.1177/1420326X06079947

Liebling, A. (2002). Suicides in prison and the Safer Prisons agenda. *Probation Journal*, *49*(2), 140–150. https://doi.org/10.1177/026455050204900208

Liebling, A., Hulley, S., & Crewe, B. (2012). In: D. Gadd, S. Karstedt, & S.F. Messner (Eds.), *The SAGE Handbook of Criminological Research Methods* (pp. 358–372). SAGE.

Liebling, A., Price, D., & Shefer, G. (2011). *The Prison Officer*. Routledge.

McCain, G., Cox, V., & Paulus, P. B. (1976). The relationship between illness complaints and degree of crowding in a prison environment. *Environment and Behavior*, *8*, 283–290. https://doi.org/10.1177/001391657682006

Moran, D. (2013a). Carceral geography and the spatialities of prison visiting: Visitation, recidivism, and hyperincarceration. *Environment and Planning D, 31*(1), 174–190 https://doi.org/10.1068/d18811

Moran, D. (2013b). Between outside and inside? Prison visiting rooms as liminal carceral spaces. *GeoJournal, 78*, 339–351. https://doi.org/10.1007/s10708-011-9442-6

Moran, D., Turner, J., & Schliehe, A. K. (2017). Conceptualizing the carceral in carceral geography. *Progress in Human Geography*, *42*(5), 666–686. https://doi.org/10.1177/0309132517710352

Morgan, R. D., Van Haveren, R. A., & Pearson, C. A. (2002). Correctional officer burnout: Further analyses. *Criminal Justice and Behavior, 29*(2), 144–160 https://doi.org/10.1177/0093854802029002002

Morris, R. G., & Worral, J. L. (2010). Prison architecture and inmate misconduct: A multilevel assessment. *Crime & Delinquency, 60*(7), https://doi.org/10.1177/0011128710386204

Papanek, V. J. (1995). *The green imperative: Natural design for the real world*. Thames and Hudson.

Paulus, P.B., McCain, G., & Cox, C. (1985). The effects of crowding in Prisons and Jails. In: Farrington, D.P., Gunn, J. (Eds.), *Reactions to Crime: The Public, the Police, Courts and Prisons* (pp. 113–134)*.* Wiley.

Shefer, G., & Liebling, A. (2008). Prison privatization: In search of a business-like atmosphere. *Criminology & Criminal Justice*, *8*, 261–278. https://doi.org/10.1177/1748895808092429

Sloan, J. (2012). "You can see your face in my floor": Examining the function of cleanliness in an adult male prison. *The Howard Journal of Criminal Justice*, *51*(4), 400–410. https://doi.org/10.1111/j.1468-2311.2012.00727.x

St. John, V. J. (2020). Placial justice: Restoring rehabilitation and correctional legitimacy through architectural design. *SAGE Open*, *10*(2), 1–9. https://doi.org/10.1177/2158244020919503

Stansfeld, S. A., & Matheson, M. P. (2003). Noise pollution: Non-auditory effects on health. *British Medical Bulletin*, *68*(1), 243–257. https://doi.org/10.1093/bmb/ldg033

Ulrich, R. S. (2002). *Health benefits of gardens in hospitals*. Plants for People International Exhibition Florida.

Ulrich, R.S., Bogren, L. and Lundin, S. (2012). "Toward a design theory for reducing aggression in psychiatric facilities". *ARCH 12: Architecture/RESEARCH/CARE/ HEALTH.* Chalmers.

Useem, B., & Goldstone, J. A. (2002). Forging social order and its breakdown: Riot and reform in U.S. prisons. *American Sociological Review, 67*(4), 499–525 https://doi.org/10.1177/000312240206700402

Wener, R. E. (2000). Design and the likelihood of prison assaults. In L. Fairweather & G. McCain (Eds.), *Prison architecture: Policy, design and experience* (pp. 49–54). Architectural Press.

Wener, R. E., & Olsen, R. (1980). Innovative correctional environments: A user assessment. *Environment and Behavior, 12*(4), 478–493. https://doi.org/10.1177/ 0013916580124005

Wortley, R. (1996). Guilt, shame and situational crime prevention. In R. Homel (Ed.), *The politics and practice of situational crime. Crime prevention studies* (pp. 11–32). Criminal Justice Press