

Institution: University of Birmingham		
Unit of Assessment: 14 – Geography and Environmental Studies		
Title of case study: Influencing the design of new prisons and the retrofit of existing carceral spaces to improve prisoner wellbeing		
Period when the underpinning research was undertaken: 2006-2019		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Prof. Dominique Moran	Professor in Carceral Geography	2001–present
Period when the claimed impact occurred: Jan 2015 – Sep 2020		
Is this case study continued from a case study submitted in 2014? N		
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>With the aim of providing better rehabilitative outcomes for prisoners, policies and processes relating to the design of new prisons in England and Wales have been changed to highlight a new imperative to include ample natural light and views of nature, smaller living units and opportunities for movement. This radical change was underpinned by a series of impactful interventions in existing prisons in England, Wales and the Netherlands where the retrofitting of therapeutic design elements has transformed the built environment and delivered improvements to wellbeing for over 80,000 prisoners to date.</p>		
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>The overall purpose of Dominique Moran’s work has been to understand the relationship between the nature of carceral spaces and the wellbeing of the prisoners who occupy them. Prisoner wellbeing is important both for the sake of those in custody, and for society more broadly, in relation to its subsequent influence on post-custody outcomes such as reoffending.</p> <p>Her pioneering research, which has led to the new carceral geography subdiscipline, has identified how punitive ideologies (i.e., what the state thinks prison is ‘for’) influence the design and operation of prisons, and how prisons are experienced by those who live and work in them, and who visit them (i.e., prisoners, staff and visitors).</p> <p>Research began with a 2006–10 ESRC-funded study of incarceration in Russia (with Judith Pallot [U.Oxford] and Laura Piacentini [U.Stirling/Strathclyde]), which found that spatial design affects experiences of custody and prisoner/visitor interactions. Motivated by these findings, Moran developed two further, concurrent ESRC-funded studies; of prison visitation (2012–16 as PI, with Louise Dixon [U.Birmingham/ VUWellington] and PDRAs Marie Hutton and Tom Disney); and of UK/Nordic carceral spaces (2014–17 as Co-I with Yvonne Jewkes [U.Leicester/Brighton/Kent/Bath] and PDRA Jennifer Turner). Both projects investigated the design and experience of carceral spaces — the former focusing just on spaces in which prisoners receive visits, and the latter, the design of the whole-prison institution. Her most recent work (2018–20) has focused on the effects of nature contact on prisoners’ self-reported wellbeing and levels of prison self-harm and violence.</p> <p>Key research findings include:</p> <p>KF1 Previously, the design of new prisons in England and Wales had simply delivered against technical specifications (operational capacity, security requirements, construction processes and materials; i.e., what these prisons ‘are’ as <i>buildings</i>), rather than considering their intended (rehabilitative) outcomes (i.e., what these buildings are intended to ‘achieve’ as <i>prisons</i>) (R1).</p>		

KF2 Access to and views of green spaces improve prisoners' self-reported wellbeing (feelings of calm and the ability to reflect; R2 and R3) and reduce levels of self-harm and violence (R4).

KF3 The spatial layout of prison visiting rooms influences the nature of visit interactions, with certain configurations improving the ability of prisoners and visitors to discuss personal and sensitive issues, and thereby supporting visits' already-proven propensity to reduce reoffending (R5 and R6).

Known internationally as a specialist in prison environments, Moran is frequently invited to discuss her work in confidential briefings ahead of formal publication of research outputs, and these confidential briefings have been pivotal pathways to the impacts described. Audiences have included:

- The UK Ministry of Justice Estates Directorate (MoJED), responsible for designing, building and maintaining prisons in England and Wales;
- The MoJED Prison Estates Transformation Programme (PETP)
- House of Commons Justice Select Committee and Public Accounts Committee
- HM Prisons and Probation Service (HMPPS; previously the National Offender Management Service (NOMS))
- The Dutch Custodial Institutions Agency (DCIA)
- The EuroPris network of European correctional agencies
- Governors of numerous individual prisons (via site visits and reports; e.g., at HMPs Berwyn, Drake Hall, Holme House, Lincoln, Liverpool and Stafford 2015–19; Nieuwegein (Netherlands) in 2017; Tulua, Jamundi, Buen Pastor (Colombia) in 2018).

3. References to the research (indicative maximum of six references)

R1: Moran, D., Turner, J., and Jewkes, Y. (2016) 'Becoming big things: Building events and the architectural geographies of incarceration in England and Wales', *Transactions of the Institute of British Geographers*, 41, pp. 416–428

R2: Moran, D., and Turner, J. (2019) 'Turning over a new leaf: The health-enabling capacities of nature contact in prison', *Social Science and Medicine*, 231, pp. 62–69

R3: Moran, D. (2019) 'Back to nature? Attention Restoration Theory and the restorative effects of indirect and vicarious nature contact in prison', *Health and Place*, 57, pp. 35–43

R4: Moran, D., Jones, P.I., Jordaan, J.A., and Porter, A.E. (2020) *Prison Greenspace, Self-Harm and Violence*, Confidential Report to the Ministry of Justice

R5: Moran, D., and Disney, T. (2018) "'You're all so close you might as well sit in a circle...": Carceral Geographies of Intimacy and Comfort in the Prison Visiting Room', *Geografiska Annaler B*, 100, pp. 179–194

R6: Moran, D., and Disney, T. (2019) 'Prison Visitation as Accessible Engagement: Encounters, Bystanders, Performance and Inattention' in Moran, D. and Hutton, M.A. (eds) *Palgrave Handbook of Prison and the Family*, Palgrave Macmillan, Basingstoke

Research Funding

R7: 2006–10 'Women in the Russian penal system: The role of distance in the theory and practice of imprisonment in late Soviet and post-Soviet Russia'. ESRC £303,522; PI Judith Pallot [Oxford], Co-Is Dominique Moran, Laura Piacentini [Stirling/Strathclyde]; ES/D00053X/1

R8: 2012–16 'Breaking the Cycle? Prison Visitation and Recidivism in the UK'. ESRC £361,191; PI Dominique Moran, Co-I Louise Dixon [Birmingham/VUWellington]; PDRAs Marie Hutton, Tom Disney; ES/K002023/2

R9: 2014–17 “Fear-suffused environments” or potential to rehabilitate? Prison architecture, design and technology and the lived experience of carceral spaces’. ESRC £728,214; PI Yvonne Jewkes, Co-I Dominique Moran; PDRA Jennifer Turner; ES/K011081/1

4. Details of the impact (indicative maximum 750 words)

Moran’s work on the design considerations of carceral spaces has led to a two-fold impact:

1. **Changes to policies and processes such that all new prisons** in England and Wales that are under construction in the ongoing £1.3bn PETP (such as HMP Wellingborough, opening 2021, £235m) **are designed to deliver rehabilitation**, with rehabilitative design elements (such as green spaces) integral to their designs.
2. The retrofitting of **rehabilitative design elements in existing prisons** in England, Wales and the Netherlands which has already delivered **improvements to over 80,000 prisoners’ wellbeing**.

Taken together, these impacts have led to **improved in-custody and post-custody outcomes**. These significantly benefit individual prisoners and wider society by helping to address high rates of prison self-harm and violence. As a result, they reduce the annual c.£3m cost of hospital treatment for self-harming prisoners, the c.£30m paid annually in litigation to prisoners and prison officers involved in violent assaults and the c.£4m annual cost of training new prison officers to replace those leaving the prison service (in England and Wales).

These improvements will translate into reduced rates of reoffending which presently costs the UK £7–10bn/year. This is evidenced by expert HMPPS/NOMS testimony, which highlights the positive impact of the inclusion of rehabilitative design elements on prisoners’ **wellbeing**: they “reduce the stressfulness of the environment, opening up headspace for [prisoners] to think about their futures” (S1). Similarly, cited in S1, the CEO of HMPPS noted that at HMP Berwyn such changes “make a real difference to the ‘feel’ of the prison” (S1).

Impact on the Design of New Prisons

Confidential briefings to policymakers and architects at MoJED (2015–16, based on pre-prints of R1), advised that rather than simply delivering ‘on budget’ and in line with technical and security specifications, the **design of new prisons should focus on delivery of rehabilitative outcomes** (KF1) and draw on the research evidence of the therapeutic effects of natural light and green spaces (R2 and R3; KF2). Described by MoJED as a “**turning point**” in PETP thinking, this advice proved “an impetus to policy formulations” and “a key part of the development of the architectural brief” (S2). It “provided a starting point for developing the designs” (S2) for these new prisons, with design features such as natural light and nature contact enabling wellbeing and rehabilitation (S3). Provision of green spaces is now a key principle of the PETP programme, with PETP Executive Architect and Chief Engineer Bryden Wood stating that their final designs for these new prisons “put her [Moran] research evidence into practice” (S4).

Impact on the Physical Environment of Existing Prisons

In England and Wales, following confidential briefings (2016 onwards to HMPPS/NOMS (supported by drafts of R2 and R3 identifying the benefits of natural light and nature contact for prisoners’ wellbeing), HMPPS committed to “transform physical environments” (S1). This commitment is “spreading fast across the entire organisation and entering into thinking at every level” (S1), influencing wellbeing for >80,000 prisoners (and >20,000 prison officers), most of whom live and work in austere built environments lacking in green space.

An HMPPS Evidence Summary which “drew heavily on” this research was “disseminated across the entire organisation and read by every Governor and operational leader” (S5). It was also used in: “prison reform design workshops” (S5) and “countless presentations and workshops

with [...] prison governors”. It features heavily in the *Rehabilitative Culture Handbook* for all prison governors, where the research underpins HMPPS’ *Rehabilitative Culture Project* promoting rehabilitative physical environments throughout the prison estate (S1).

More specifically, confidential advice (based on R2 and R3) tailored to individual prisons via site-visits and reports, **led directly to changes affecting >5,000 prisoners in the UK**. For example:

1. HMP Berwyn have made “rehabilitative physical environment” a strategic goal and introduced non-standard interior colour schemes, whole-wall nature images and exterior landscaping (KF2; R9; S5 and S6; Figure 1a and 1b).
2. The Teeside Reform Prisons Strategy took direct guidance from “transformed physical environment” (S7), to inform a package of interventions. These included: “change of colour scheme, better soft furnishings, illuminating the concrete walkways with coloured recycled plastics, [...] colour coding to help people locate specific areas within the prison, and building a pond by one of the houseblocks” (KF2; S1); and a successful application to the Woodland Trust for a grant to plant 340 trees on the site.
3. HMP Stocken created a keyworker garden (KF2; S1; R9).
4. HMP Lincoln committed to every cell window having a view of green space (KF2; R9; S8)

The impact has also reached an international audience, with Prof. Moran engaged with prisons across the EU as well as in Colombia and New Zealand. The most notable outcome of this to date has been an extension of the work to **existing** prisons in the Netherlands. Having read R4, policymakers at the DCIA invited Moran to Nieuwegein prison in 2017 to give confidential advice about how prison visiting rooms’ spatial layout can enable supportive visits, and enhance wellbeing, rehabilitation and desistance from reoffending. Based on early drafts of R5 and R6, her advice led to a **complete redesign** of the visiting room. An independent evaluation found that as a result, **prisoner wellbeing improved**, without any increase in ingress of contraband such as phones or drugs (KF3; R8; S9; Figure 1c).



Figure 1: Interventions at HMP Berwyn (a and b) and Nieuwegein prison (c).

5. Sources to corroborate the impact (indicative maximum of 10 references)

S1: Letter from Dr Ruth Mann, Rehabilitative Culture Lead, Public Sector Prisons North, HM Prison Service, 5 October 2018

S2: Letter from Andrew Digby, (then) Head, Design and Technical Standards, Ministry of Justice, Home Office, Crown Prosecution Service Shared Estates Service, “Outcome of early design work in support of the Ministry of Justice Prison Estates Transformation Programme” by email, 20 May 2016

S3: Email from Steven Tilkin at Bryden Wood, MOJ Early Design Support, with pdf attachment ‘MOJ PETP Research Impact’, 13 May 2016

S4: Letter from Jaimie Johnston, Director, Bryden Wood, Executive Architect and Chief Engineer of the Prison Estate Transformation Programme for the Ministry of Justice, 28 November 2019

S5: Letter from the late Dr Ruth Mann, (then) Head of Evidence, Commissioning Strategies Group, National Offender Management Service by email, 1 July 2016

S6: Letter from Russell Trent, (then) Governor Designate of HMP Berwyn, 26 July 2016

S7: Teesside reform prisons, 'Our Prison Strategy', 1 July 2016

S8: Email from Paul Yates, Governor of HMP Lincoln, 7 January 2019

S9: Correspondence with Toon Molleman, Division of Penitentiaries and Foreigner Detention, Dutch Custodial Institutions Agency, Ministry of Justice and Security, Netherlands, 17 July 2017; and Nienke Tenneij, Policy Department Dutch Custodial Institutions Agency, Ministry of Justice and Security, Netherlands, 24 November 2019