

ual central
saint martins

**DESIGN
AGAINST CRIME**
Research Centre


Ministry
of Justice



CELL FURNITURE

DESIGNS FOR SAFETY, WELLBEING, AND SUSTAINABILITY



Cell Furniture, Designs for Safety, Wellbeing, and Sustainability, 2019

Design Against Crime Research Centre

BA Product Design, Central Saint Martins

CONTENTS.

CONTEXT

- 09 Design Brief
- 10 Why Design For Prison
- 12 Cell Furniture Project
- 14 Research
- 18 Made In Prison
- 20 Perpetrator Techniques

1

DESIGNS

- 34 Quotes
- 36 Student Designs

2

RESEARCH

- 78 Cell as Empathy Thing
- 84 Evaluation
- 86 Conclusion
- 88 Who are we
- 90 Contributors
- 92 References
- 94 Bibliography

3



SECTION 1:

CONTEXT

- 09 Design Brief
- 10 Why Design For Prison
- 12 Cell Furniture Project
- 14 Research
- 18 Made In Prison
- 20 Perpetrator Techniques

INTRODUCTION.

DESIGN BRIEF

This project aims to generate a new range of cell furniture that is not only robust and sustainable, but endeavours through improved design to increase wellbeing for prisoners and prison staff. To do this, a collaborative design approach involving stakeholders with diverse experiences was delivered. Drawing on research with prisoners, officers, and a number of stakeholders outside of prison helped us address tricky issues faced by prisoners regarding use of furniture. The project hopes to improve furniture currently in use and add new, sustainable designs to the existing range. Overall the Cell Furniture project aims to generate new concepts and develop new designs that could be manufactured inside prison.

WHY DESIGN FOR PRISON.

The UK locks up more people than any other Western European country;[1] in fact only Russia and Turkey lock up more people than the UK.[2] The extraordinary rise in UK prison numbers over the last twenty years, which has seen the prison population double[3] at a time when, globally, crime is found to be decreasing,[4] comes at a terrible cost to the taxpayer, society and communities.[5] Inflation in sentencing and the social and economic consequences of overuse of custody means that UK prisons are now overcrowded.

The Prison Reform Trust identifies that almost a quarter of the prison population are affected by overcrowding.[6] In 2016–17 nearly 21,000 people were found to have been held in overcrowded accommodation (in cells not designed for use by more than one person); this level of overcrowding has remained broadly unchanged for the last 14 years.[7] This has had dire consequences on prison life and staff morale. The Howard League has argued that for staff, overcrowding affects stress levels and attendance and ultimately how many people are available to manage prisoners. For prisoners, overuse of custody affects the amount of time that is spent in a cell, particularly an overcrowded cell, impacting upon prisoner stress and wellbeing, on what meaningful or rehabilitative activities can be undertaken, and ultimately on what staff and other resources are available to reduce the risk of prisoners reoffending. Overcrowding can also result in prisoners being sent to jails further away from family and other support networks than is considered fair or appropriate by some. Overcrowding in prison has consequently led to what the Howard League calls “a broken system”, where operationally it is more difficult than ever before to make prison work. All these problems with prison, widely covered by diverse media, led the current Secretary of State for Justice, David Gauke, in February 2019 to make an impassioned call for an end to short jail terms, and a rethinking of the role of prison:

"I believe we are nearing a time when a combination of technology and radical thinking will make it possible for much more intensive and restrictive conditions to be applied in more creative and fundamental ways outside of prison." [8]

The Design Against Crime Research Centre team firmly believes there are many viable criminal justice alternatives that should be explored before and beyond custody, and wholeheartedly supports calls for new approaches to rethinking the role of prison in the UK. Nevertheless, we undertook this project because we truly believe that even in the most difficult, "worse-case" scenarios design can make a difference. Many prisoners currently locked up in overcrowded prisons are poorly served by the cell furniture they live with and this limits their ability to live well, directly and indirectly increasing suffering. Flexible design solutions for small or confined living spaces, such as furniture for student and travel accommodation, could be relevant to UK prisons and improve life for prisoners. But in the prison context such furniture also needs to design for safety, addressing the increased risk of violence, self-harm and suicide in prison.

Design impacts on every aspect of our lives, including the products, environments, and services that are delivered in prison, and whilst improved furniture design is clearly not the answer to an overcrowded, "broken" prison system, small improvements that make living in confinement easier might make a difference to the daily lives of people in prison, both staff and prisoners.

[1] A. Travis, 'UK Prison Population is Biggest in Western Europe' The Guardian, 8 May 2016.

[2] Council of Europe Annual Penal Statistics 2015.

[3] Howard League for Penal Reform, "Why the System is Broken", <https://howardleague.org/why-the-system-is-broken/>, downloaded September 2018.

[4] M.F. Aebi and A. Linde (2010), "Is There a Crime Drop in Western Europe?", *European Journal on Criminal Policy and Research* 16(4): 251–277.

[5] Prison Reform Trust, Prison – The Facts, Bromley Briefings, Summer 2018, <http://www.prisonreformtrust.org.uk/Portals/0/Documents/Bromley%20Briefings/Summer%202018%20factfile.pdf>, downloaded June 2019.

[6] *ibid.*

[7] *ibid.*

[8] V. Dodd, "Prison isn't Working: David Gauke Calls for End of Short Jail Terms" The Guardian, 18 February 2019.

CELL FURNITURE PROJECT.

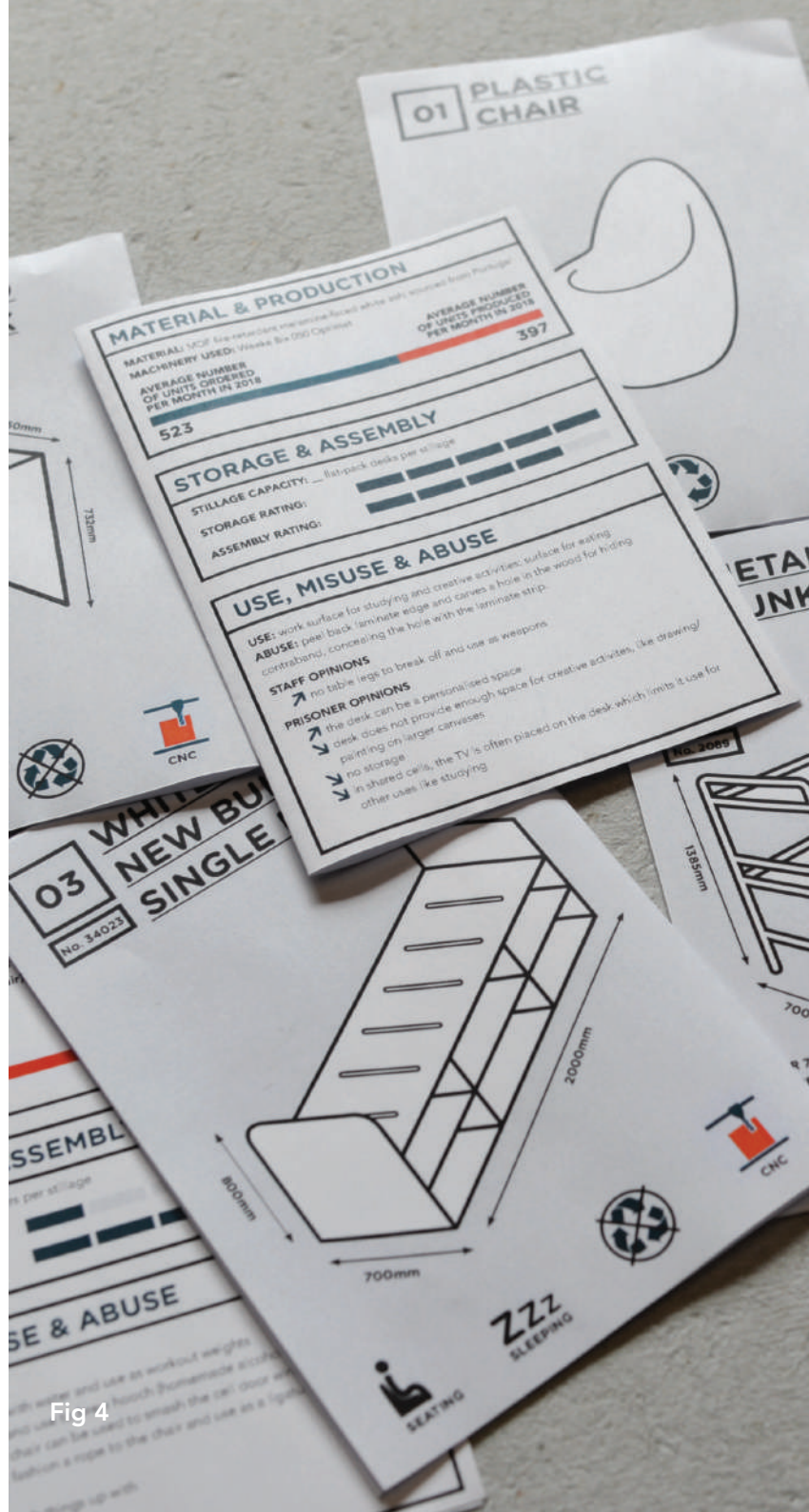


Fig 4

INTRODUCING THE BA PRODUCT DESIGN CELL FURNITURE PROJECT

This student project was created by the Design Against Crime Research Centre (DACRC) and funded by the Ministry of Justice (MoJ; 2018–20). Working in partnership with UK Prison Industries (see p.19), we are researching and investigating how to improve cell furniture for safer custody and to reduce both the impact of overcrowding and opportunities for violence, self-harm and suicide. The project aims to generate a new range of prison furniture that can be made in prison – so as to create opportunities for prisoners to develop vocational skills through its manufacture. We also aspire to create furniture designs that are robust and sustainable, addressing the complex needs of prisoners living in cells and contributing to improve safety and wellbeing.

The design work has been informed by user research conducted by the DACRC team in numerous prisons across the prison estate, including a series of participatory design workshops with prisoners at HMP Standford Hill on the Isle of Sheppey. Student research has included a visit to HMP Pentonville to examine cells as well as engagement with ex-prisoners who were invited to Central Saint Martins to share their experiences of using cell furniture. The researchers were also informed by performances from ex-prisoners featuring creative accounts of prison experience (Dean Stalham), and lectures from researchers and practitioners that explored sensory and olfactory design issues (Jenny Tillotson) and considerations of sound in confined spaces (John Wynne), as well as an understanding of the history of crime, justice and prisons, presented by Ben Bethell, and an account of prisoners' lives by Carlotta Allum, who presented films and diaries she made with prisoners as part of her work with Stretch. Students complemented this research with their own, focusing on specific contexts and product areas that they chose to address. Given that our students had limited access to actual prisons, we built a prison cell in the product design studio, to average prison specifications, so students could experience confinement, and could engage with theatre and design techniques to help them understand what their designs would feel like and contribute in situ.

RESEARCH

Before the students started to engage with this project, the DACRC team gathered a lot of information, both quantitative and qualitative, about cell furniture. This research helped students to understand what is at stake in designing for prison. Several research stages were completed.

The first involved visualisation and mapping of the processes and systems related to furniture and product services within the HMP estate. The DACRC team made numerous prison visits to understand prison industry workshops, furniture supply chains and distribution systems. This information was synthesised and shared with students (see Fig 4 Existing whitewood and other prison furniture and Fig 5 Furniture data collection templates).

The second stage of the research involved gathering information relating to use, misuse and abuse of cell furniture from interviews with HMPPS staff, prison officers and inmates, and prison visits. These activities enabled us to visually document, for the first time, what furniture is being used in the HMP estate (included as line drawings in this catalogue – see also Fig 4). Also visualised are the ways this furniture is used, misused and abused in prison, summarised as “user” and “perpetrator techniques” (again featured within this catalogue).

To validate this data, the third stage of research shared the findings with HMPPS staff and prisoners, primarily at HMP Stanford Hill, who provided feedback that refined research insights, defining categories of “users” of cell furniture and their specific furniture needs. Following this research synthesis, the same cohort worked with the design team to deliver a fourth stage: the collaborative design of furniture concepts that addressed the needs of the defined users.



Fig 5



Fig 6

Fig 7

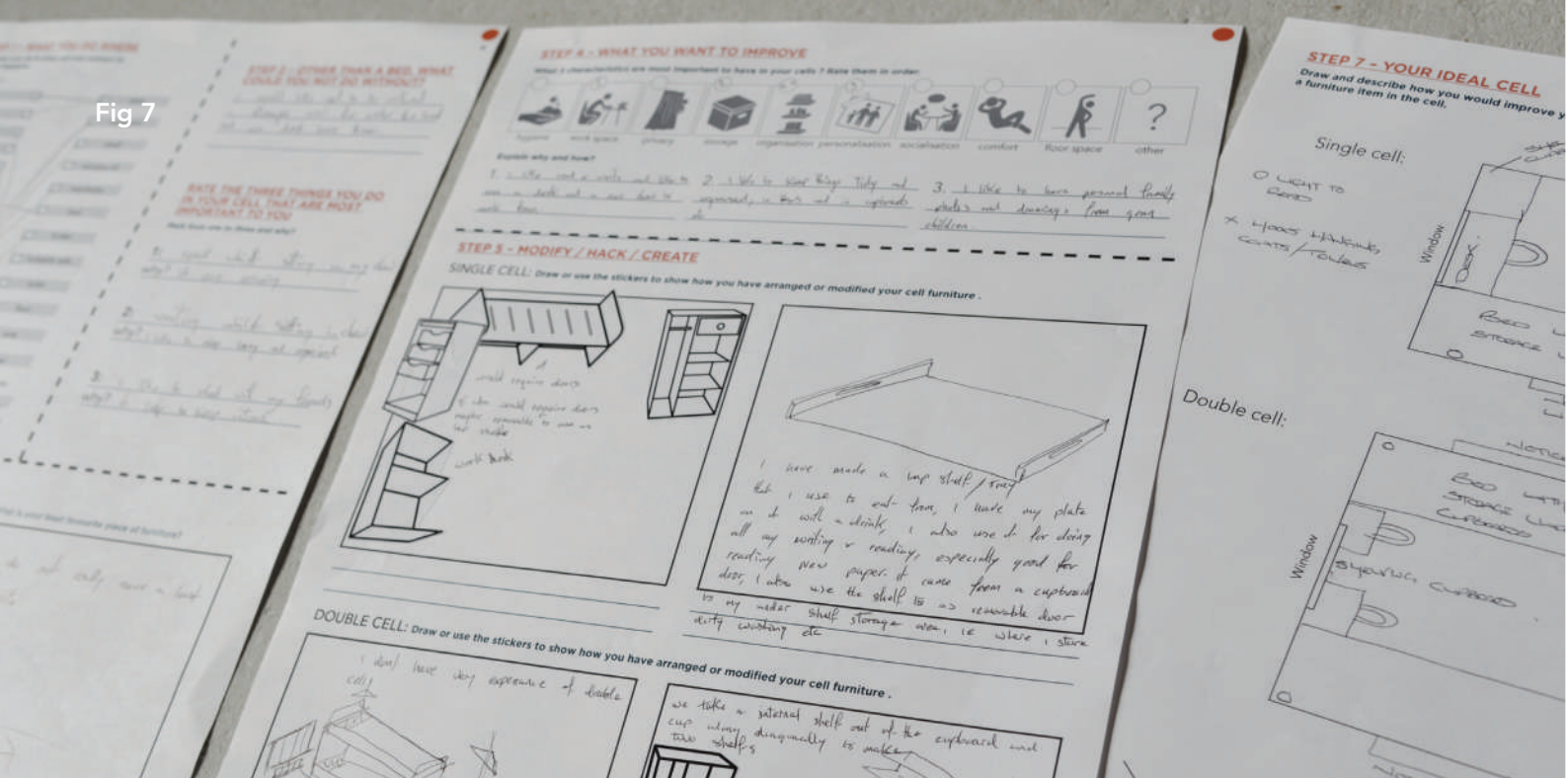
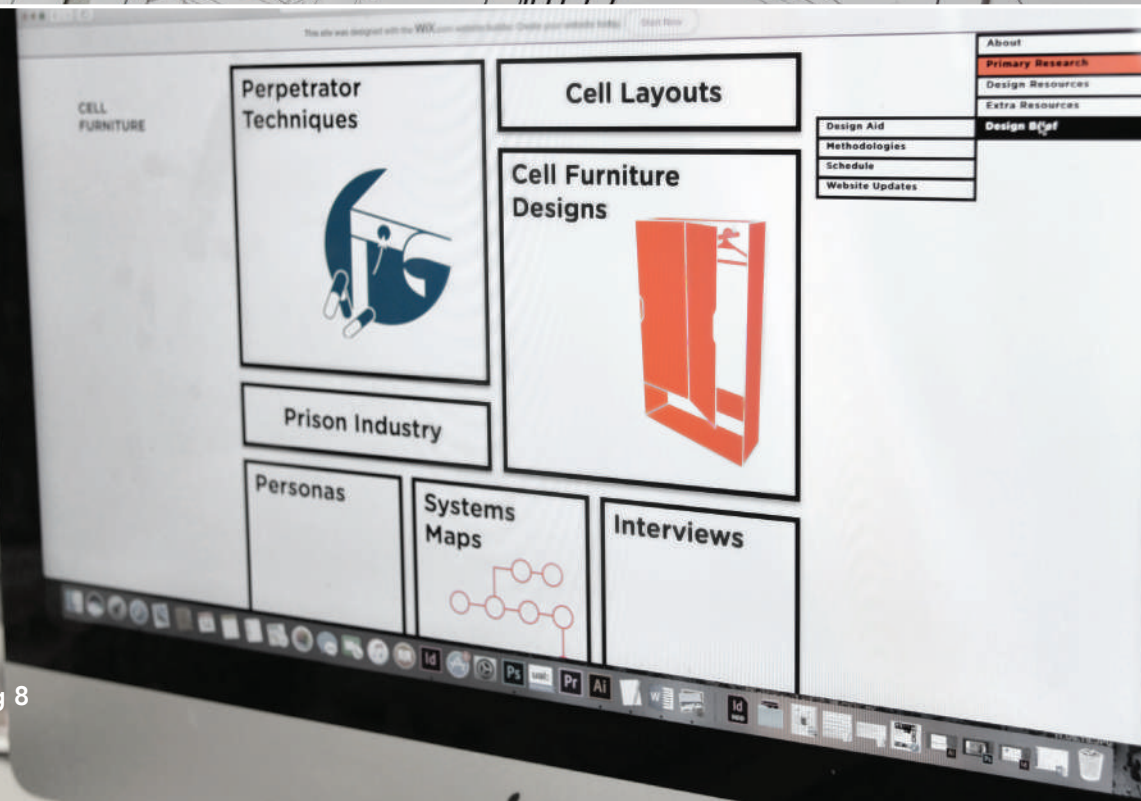


Fig 8



Some of these collaborative design sprints with prison staff and inmates undertaken by the DACRC team ran concurrently with the Central Saint Martins student project.

All the material gathered by the DACRC team in these sessions (see Fig 6 and Fig 7 Data Gathering Workshops in prison) – from provision and management to use, misuse and abuse of cell furniture – was synthesized into design resources which have been compiled as a password protected Cell Furniture website (see Fig 8 Website). We hope this website will in future also be useful in helping to train new prison staff, as well as alerting designers who engage with the MoJ or in collaborative design activities with prisoners to the key issues at stake when designing prison furniture.

The student designs featured in this catalogue, collaborative design activities with prisoners and prison staff, and designs created by the DACRC design team itself have all contributed to a “design solutions pool” that the project team will continue to develop, prototype and test throughout 2019, when those designs that stakeholders consider to be most effective in delivering safer custody will be exhibited. At the time of writing, the ideas generated by the student designers have not yet been fully assessed by the prison industries team, who will feed back about those designs that have the most potential, and so we are hopeful that some of the designs in this catalogue, all generated for open licence, will find their way into prison manufacture and contribute to improving cell furniture and prisoner and staff wellbeing.

MADE IN PRISON.

ABOUT UK PRISON INDUSTRIES

Prison Industries (PI) is an internal unit within Her Majesty's Prison and Probation Service (HMPPS). PI is responsible for providing a wide range of goods and services for both prisons and increasingly the wider MoJ and other central government departments. One of its remits is to give prisoners vocational experiences to improve employment prospects on release and reduce the risk of re-offending. It does this by providing prisoners with employment and "on the job" training, supporting the development of life skills and healthy lifestyles in preparation for their release. These prisoners, working within PI, produce high quality goods and services that meet the daily needs of prisoners in custody, from the food they eat to the beds they sleep on.

HMPPS manages Prison Industries across 95 prisons in England and Wales, and currently operates 388 workshops employing over 520 staff and around 6,680 prisoners and detainees. The PI team, led by Jason Swettenham (who also has responsibility for delivery of Catering, Retail and PE), collectively manage production and provision across Engineering, Plastic Moulding, Land Based Activities, Laundries, Print, Textiles, Waste Management and Recycling, Woodwork, and various other types of work for other government departments. Conservative estimates regarding the turnover of this huge department suggest that it manages budgets worth over £200m, including £60m turnover on food contracts.[9]

[9] Source: Draft "Prison Industries, Catering, Retail and PE3 Year Strategic Delivery Plan 2019–21".

PERPETRATOR TECHNIQUES: SCENARIOS OF USE

Through interviews with prisoners and prison staff we have compiled a list of scenarios and techniques in which prisoners use, misuse (hack) and abuse furniture. This page focuses on different ways prisoners use the furniture in their cells.



COMFORT

Although not allowed, stacking two mattresses on top of each other helps make a bed more comfortable. For additional padding, inmates can also add blankets on top and wrap everything in a bed sheet to keep it all in place.

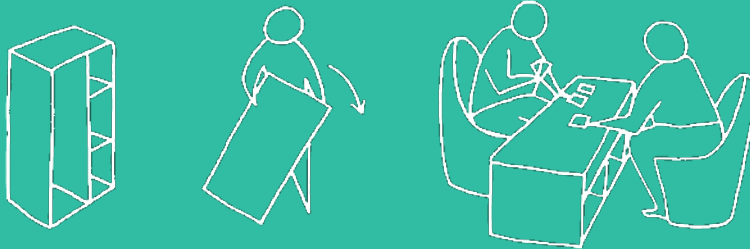
SOCIALIZATION

Inmates may move two cupboards together and add a towel or folded bed sheet on top to use as a table when they play games or socialise.



PRIVACY

Lying on the mattress underneath the bed may help inmates feel safer, and give them a sense of privacy.

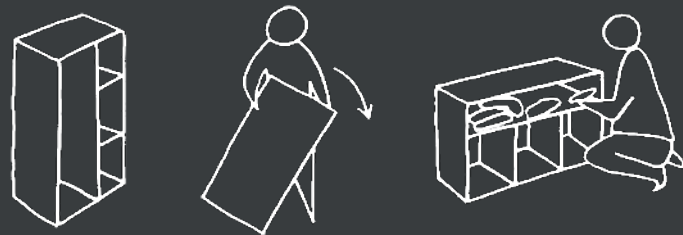


ADDITIONAL WORKSPACE

Flipping cupboards and lockers on their side creates a large table or a place to put the TV on.

STORAGE

Turning cabinets on their side can improve the functionality of the compartments and create more horizontal space. For example, inmates might find it better to store their shoes in the would-be hanging section of the cupboard.



PERPETRATOR TECHNIQUES: SCENARIOS OF MISUSE

Limited resources leads prisoners to come up with ingenious ways of “hacking” the furniture, using the furniture in other ways than originally intended.



SMELL

Toilets often don't have a cover; covering up with a sheet or blanket helps improve inmates' sense of hygiene and reduce the smell.

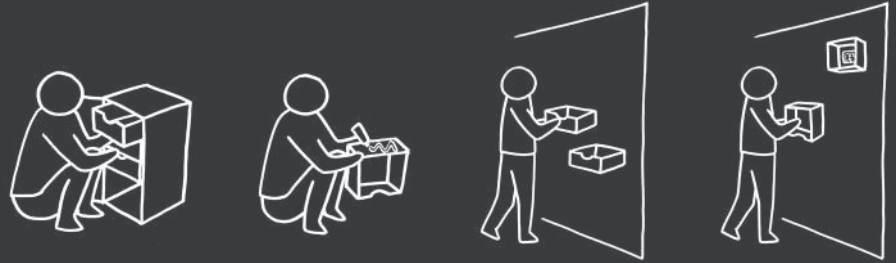
PAIN RELIEF

When experiencing back pain, it is recommended to put one's leg up when sleeping in order to relieve pressure. For lack of anything better, the chair can be used for that purpose.



DECORATION

Using prison administered toothpaste or even milk powder as an adhesive, people glue materials, sometimes drawers, to the wall to use as makeshift shelves.



EXERCISE

Inmates can create a punch-mat by rolling up an old mattress and tying it with ripped sheets.

SMELL

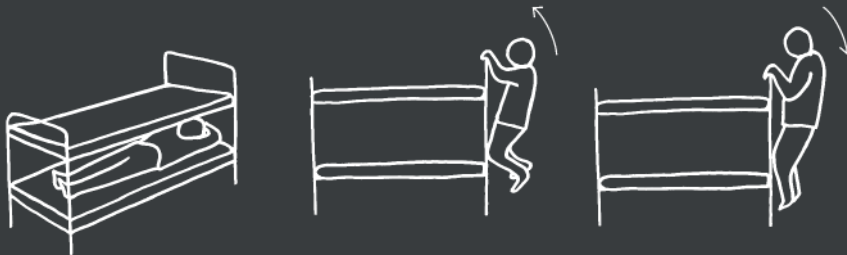
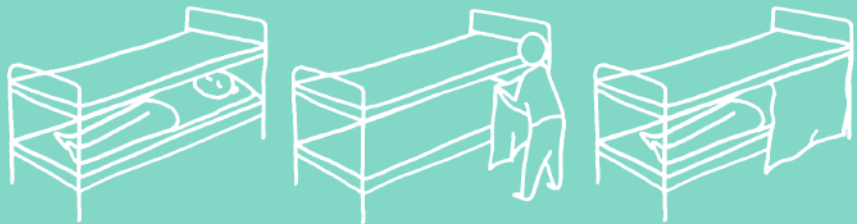
Smell is an issue and is very difficult to control in the cell. Pouring a mixture of water and fabric softener into a spray bottle to use as air freshener can help.



PERPETRATOR TECHNIQUES: SCENARIOS OF MISUSE

PRIVACY

Privacy is an issue when sharing a cell. Inmates might position a sheet or towel between the top mattress and the bed frame to use as a privacy curtain and create their own space. However, these types of visual obstruction are not allowed.

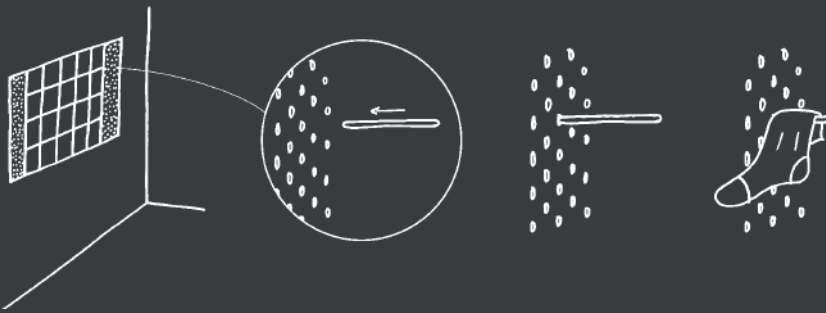


EXERCISE

The end of a metal bunk bed can be used for pull-ups; however this can eventually damage it.

SMELL

Pouring a mixture of water and fabric softener into a kettle and boiling it can freshen the smell of the cell.

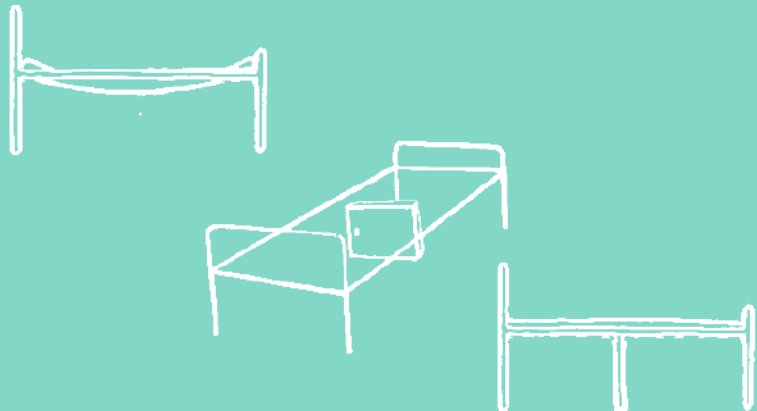


VENTILATION

Socks and underwear can be hung to dry on matchsticks inserted in window ventilation holes.

COMFORT

Inmates often place cupboard doors or pinboards under their mattress on the metal bed frame to keep the mattress from sagging through the metal lattice.



PERPETRATOR TECHNIQUES: SCENARIOS OF MISUSE

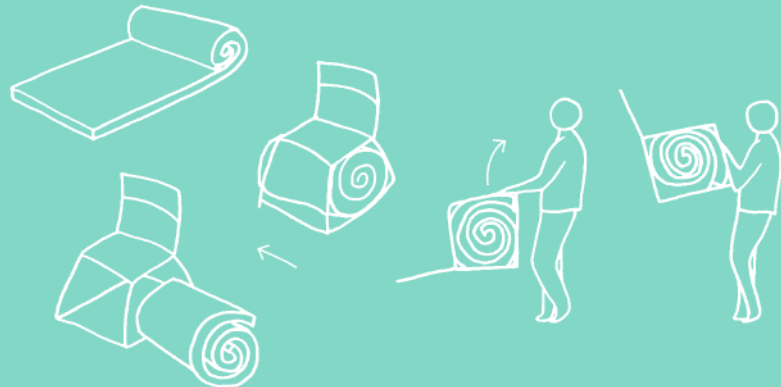


SUNLIGHT

One way of making window curtains is to secure bed sheets by placing plastic bowls in between the window bars.

EXERCISE

If people need more weight for lifting and they have a tubular metal chair, they can roll up their mattress and insert it in between the chair legs.



INSULATION

In winter, inmates might use ripped sheets or cardboard to cover broken window sections in their cell.



EXERCISE

Inmates use their chairs in a variety of exercises, including dips and press-ups.

PERPETRATOR TECHNIQUES: SCENARIOS OF ABUSE

This page documents ways in which cell furniture is used for abusive or illegal purposes such as self-harm, making weapons, vandalism or hiding drugs.



TEMPERATURE

In hot, uncomfortable and sometimes unbearable temperatures, inmates use sharp or hard objects to break the window glass to get more air flow. They then have to cover the window with cardboard or sheets when it gets colder.

CONCEALMENT

Laminate can be peeled from items of furniture, making it possible to dig a hole in the MDF, hide things such as drugs and cover the hole up.





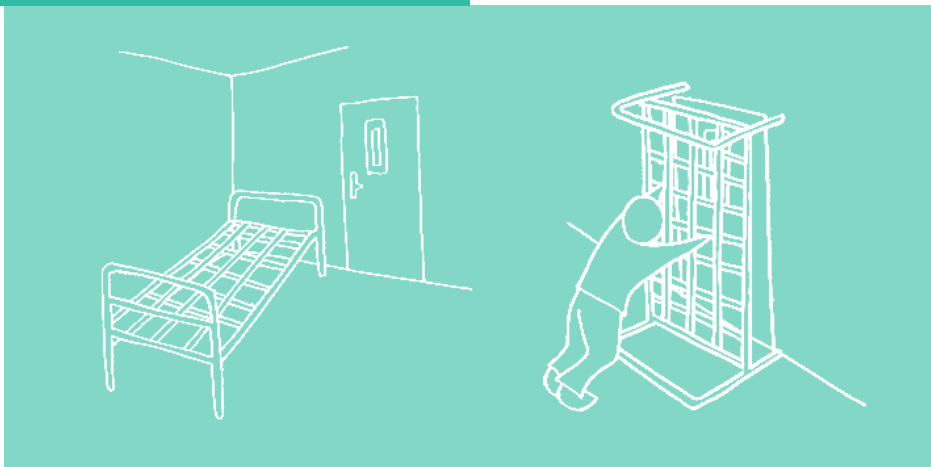
ANGER

Prisoners break furniture for a variety of reasons: sometimes out of pure frustration, sometimes strategically in an attempt to get their own cell. One common abuse is to sit on the top bunk of the bed with one's back to the wall and kick the rail until it breaks.

BARRICADE

People sometimes barricade themselves in their cell as a method of protest.

They stack their furniture from the door to the back wall so that the door cannot be opened unless prison staff take apart the door frame from the outside in order to open the door the opposite way.



PERPETRATOR TECHNIQUES: SCENARIOS OF ABUSE

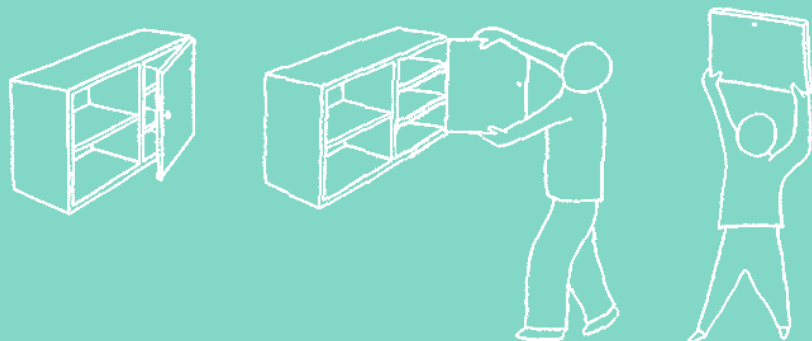


SUBSTANCE ABUSE

Using the plastic chair as a large container, inmates burn a hole in the chair and insert water, fruits such as oranges, and juices. They leave the mixture to ferment and later drink their cell-made alcoholic beverage, which is known as hooch.

WEAPONISATION

The doors of furniture are often missing due to previous cell occupants pulling them off to use as weapons or as tools for other purposes (e.g. bed supports). Furniture hinges can also be filed down and used as weapons.



CONCEALMENT

Inmates might tear a hole in the mattress cover to hide drugs and then conceal the hole.



WEAPONISATION

The double bed ladders are easy to break. The broken pieces of wood can then be used as weapons.

POST-IT

In acts of protest, people might use a chair or other object to break the cell door's viewing window when they are angry. If they've smashed up the rest of the cell they might "post" (or shove) items and broken bits through the broken window into the corridor.



2

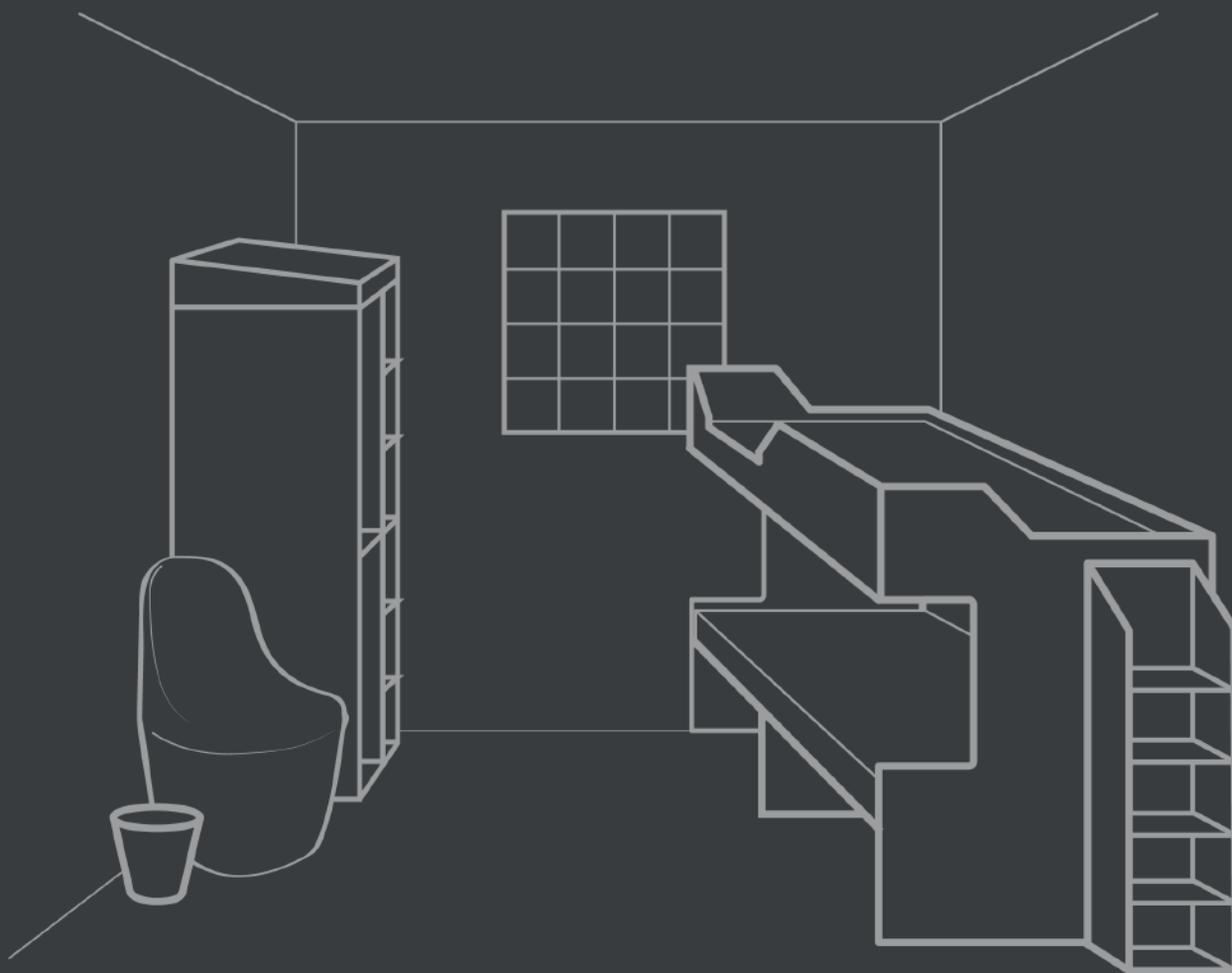
SECTION 2:

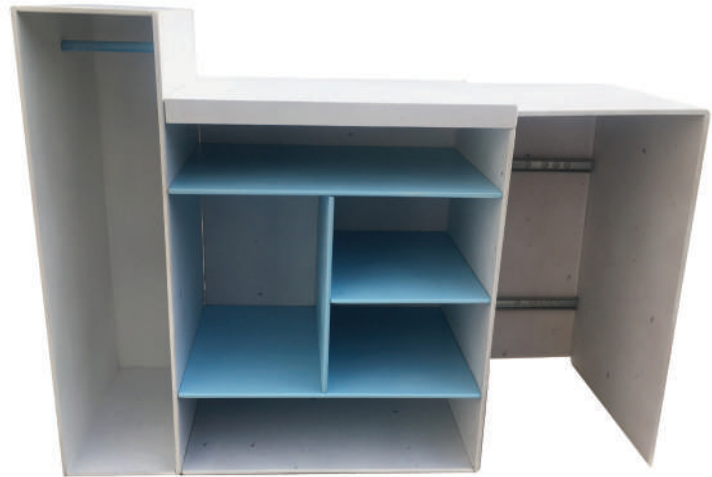
STUDENT DESIGNS

- 34 Martin's Quote
- 36 Strech - Aleks Vuko
- 38 Zealot Desk - Henry Yun Huang
- 40 Occam Pack - Ana DePellegrin, Hafeez Dawood, Pietro Fareri
- 44 PJ's Quote
- 46 Sloom - Alfred Low Wei Leong
- 48 Chris' Quote
- 50 Moti - Qing Zeng
- 52 Up - SiWai (Wesley) Lei
- 54 Daniel's Quote
- 56 Pablo - Pauline Coatalem
- 58 Lounge Chair - Stephanie Lam
- 60 Nicolas' Quote
- 62 A|PART - Asli Kaygusuz
- 64 3 In Cube - Ines Attieh
- 66 Space Saver - Leah (HyeJin) Lee
- 68 Archive - Niloo Alaghband
- 70 Errol's Quote
- 72 The Comfort Collective - Kevin Mehmeti
- 74 Roll Me - Kritapat Pornpipatpaisan

“ You have a mixture of guys. You have some people that want to study, some people that are arty/crafty and want to paint, do whatever. Most people write letters, and particularly in here we've got paperwork galore. So you do need someplace where you can write... Four and a half months I ate standing up because there wasn't enough room for two of us to eat. So I ate standing up.

Martin, Prisoner HMP Standford Hill





STRETCH

Stretch is a multi-functional storage and sliding desk unit, which addresses the needs of male prisoners in the UK. One unit per occupant can be fitted in each cell, meaning each inmate can have their own storage and desk area. I hope this solution will reduce conflict between cellmates by creating equal division of space and allowing them to adapt the furniture to their preferred use. The desk saves valuable space by sliding behind the storage unit when it's not in use. It also encourages the user to keep a tidy workspace, which is shown to increase productivity.



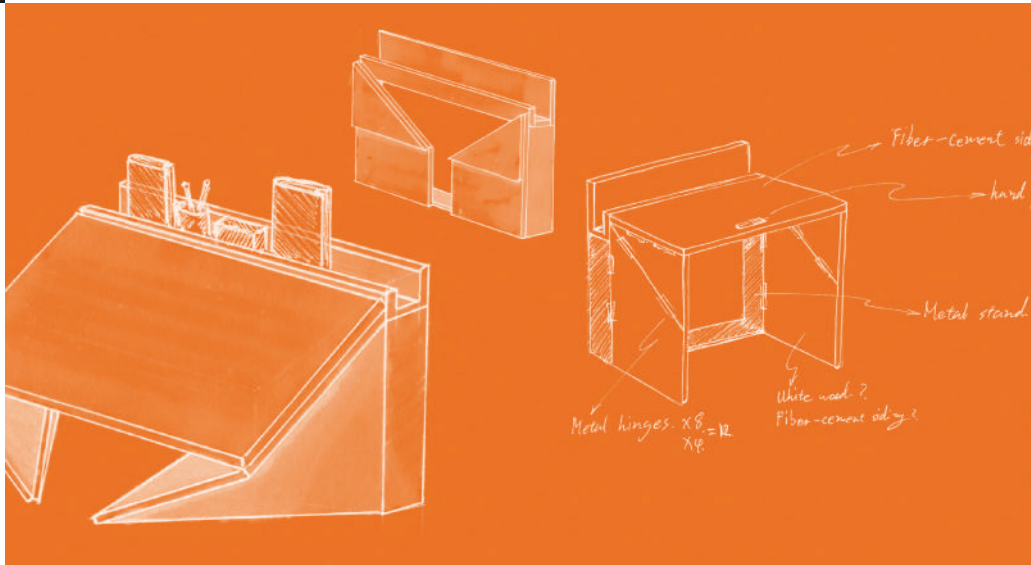
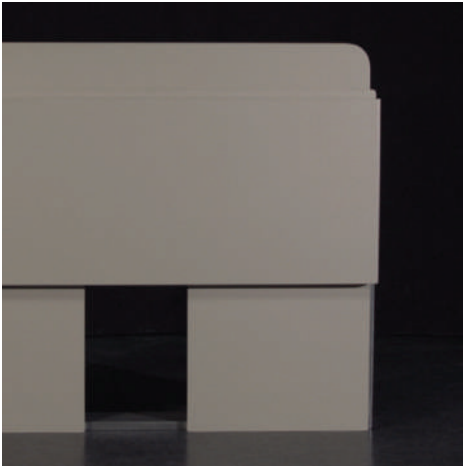
ALEKS VUKO

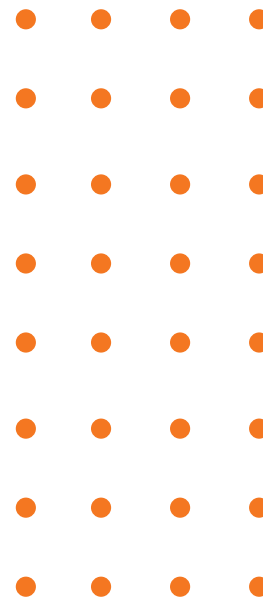
a_vuko@hotmail.co.uk
www.behance.net/vukodesign
www.linkedin.com/in/vukodesign/



ZEALOT DESK

Zealot Desk is inspired by the art of origami. This design allows the user to fold down the desktop without having to put their things away. They can simply move objects to the shelf at the back of the desk. As space is narrow in Victorian style prisons and the rate of incarceration is increasing in the UK, cell space has become a major problem. Therefore, Zealot Desk is designed with a fixed shelf on the back of the desk to place necessities. When it is not in use, the user can simply flip down the desktop to get more room space.





HENRY YUN HUANG





ANA DE PELLEGRIN

anadepellegrin@gmail.com

www.linkedin.com/in/ana-de-pellegrin-09875416b/

www.anadepellegrin.com



HAFEEZ DAWOOD

hafeezdawood@gmail.com



PIETRO FARERI

pietrofareri@protonmail.com

OCCAM PACK

The Occam Pack is a comprehensive interior redesign of a HMP cell environment. Adopting a holistic approach allowed us to be in control of the interactions between all the objects within the cell, and therefore limit the potential for misuse and abuse of the furniture. The redesign aims to accomplish three things: introduce equality in designated space, allow for interchangeability and customizability of components, and incorporate in daily life a sense of structured routine through the use of the furniture.

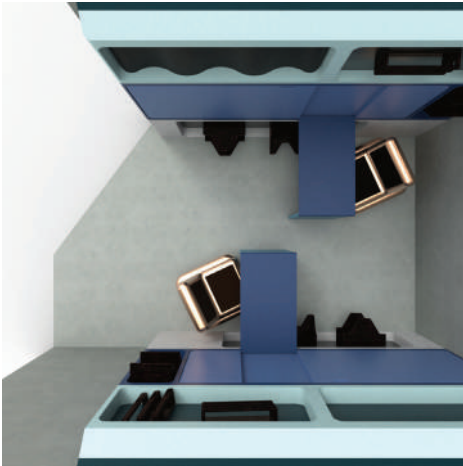


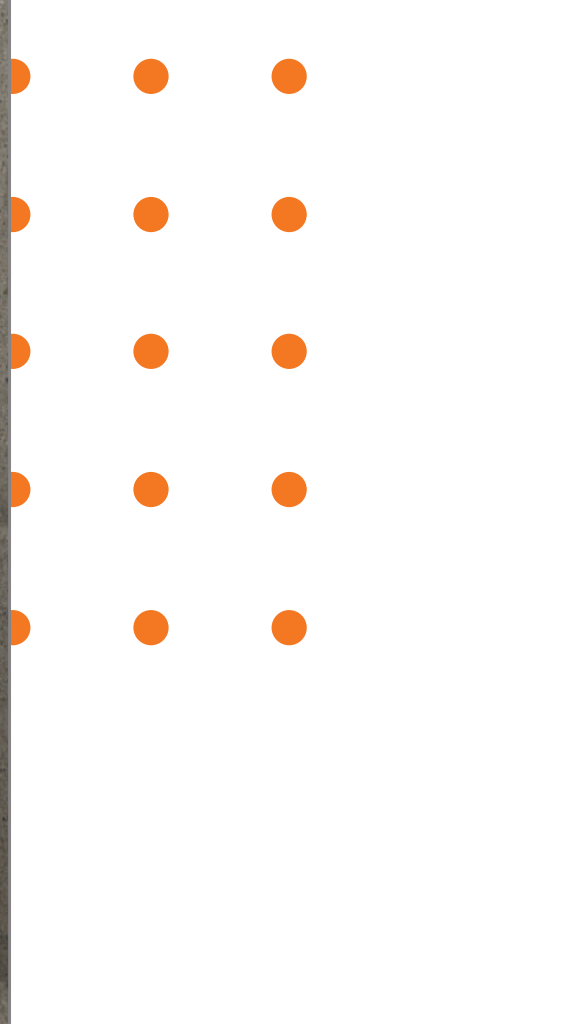
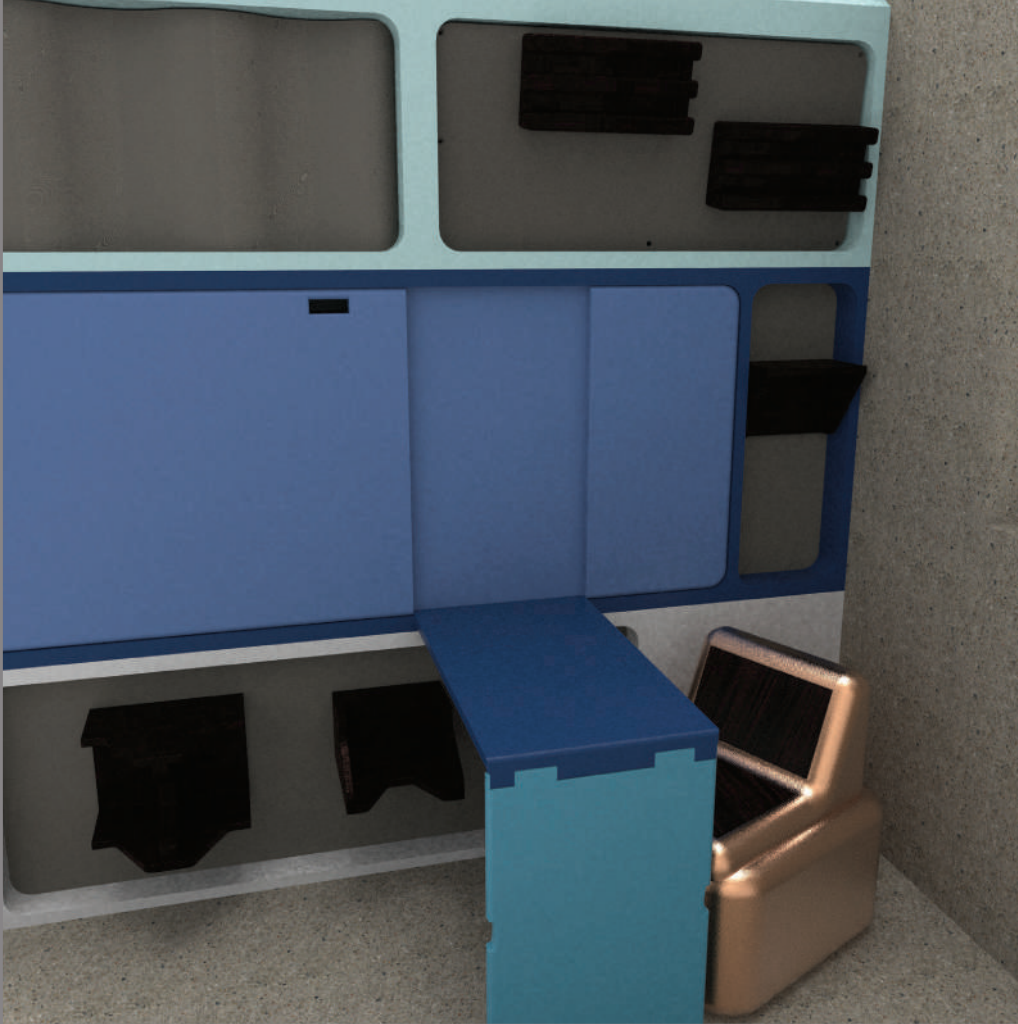
Occam Pack is comprised of:

Occam Combi: a bed and desk unit that share the same area in the cell, thereby saving space and enabling a healthy routine.

Occam Chair: a multifunctional chair that can be assembled and disassembled to enable various uses and storing options. The interactive nature and antimicrobial properties of the copper plating add to the customizability of the environment as well as inmate wellbeing.

Occam Velcro: an open-plan storage system combining the flexibility of velcro with the organic quality of cork, thereby guaranteeing opportunities for total personalisation and directly involving the inmate in the management of their space.



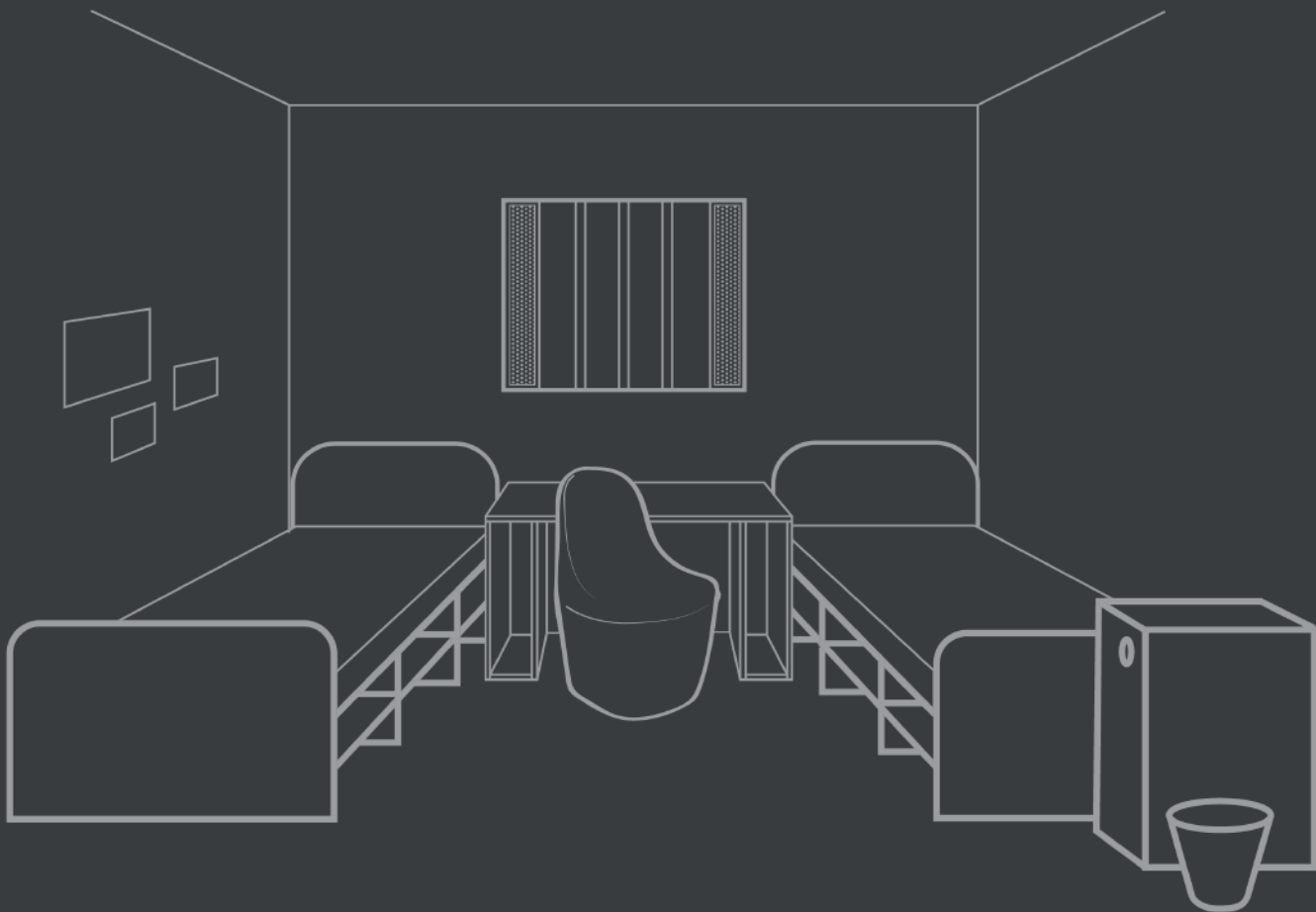


Alongside the needs of inmates, the proposal aspires to satisfy the needs of guards by lessening some of the difficulties that occur during routine inspections. Whilst being mindful of the MoJ's internal manufacturing processes, the Occam Pack also accomplishes complete circularity through careful selection of materials and production.



“ For some reason there are no toilet seats. We used to get cardboard – find boxes. So we’d get the boxes and put it over our toilet seats and then sometimes get enough boxes so we could turn the toilet seat into a chair.

PJ, prisoner at HMP Standford Hill





ALFRED LOW WEI LEONG

Alfredlw@live.com

www.behance.net/Alfredlw

www.alfredlw1.wixsite.com/lowprofile

www.instagram.com/lowprofile/

www.linkedin.com/in/alfredlw/





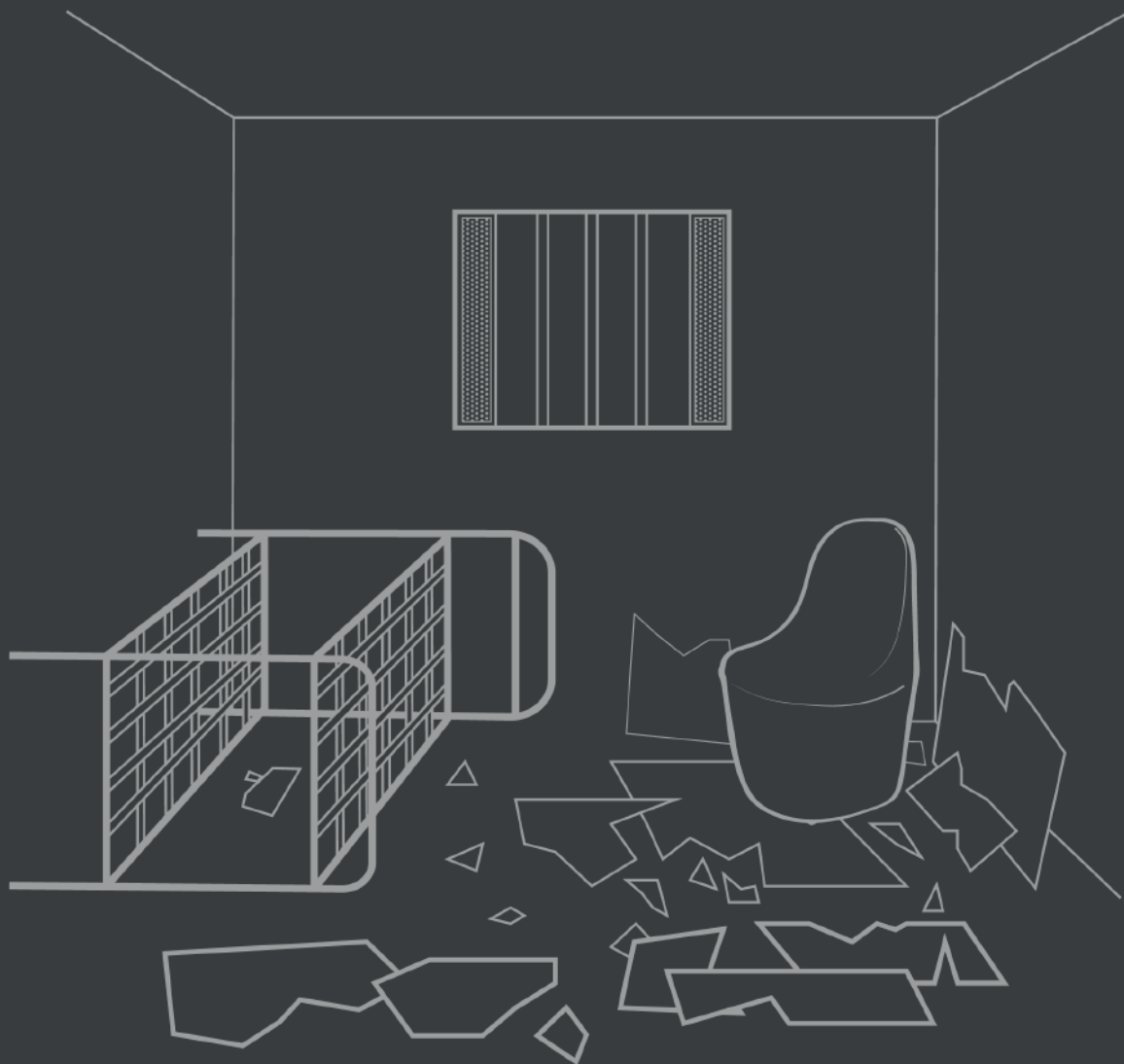
SLOOT

Sloom aims to improve the cleanliness and hygiene of the cell. In a confined space which lacks proper ventilation, smell is one of the biggest concerns according to inmates, followed by lack of seating. Sloom is a piece of furniture that aims to improve the current situation by acting both as a toilet bowl cover and a leisure chair. The key feature of Sloom is the integrated active carbon upholstery, recycled from old fire-retardant bedding and covered with Kevlar, a reinforced fabric that withstands cut and tear. In addition, the mainframe of the chair is made of heat-treated aluminium to ensure high durability.



“ I haven't seen people just smash things up for no reason. A lot of it has to do with when you're in them jails and you're banged up for so long and when you are meant to get out for a bit of socialisation which is an hour a day. Then they might call over the mic that there's no staff today. So then you're not out that day. And that could happen two to three times a week... That's when a lot of the stuff gets smashed up.

Chris, prisoner at HMP Standford Hill

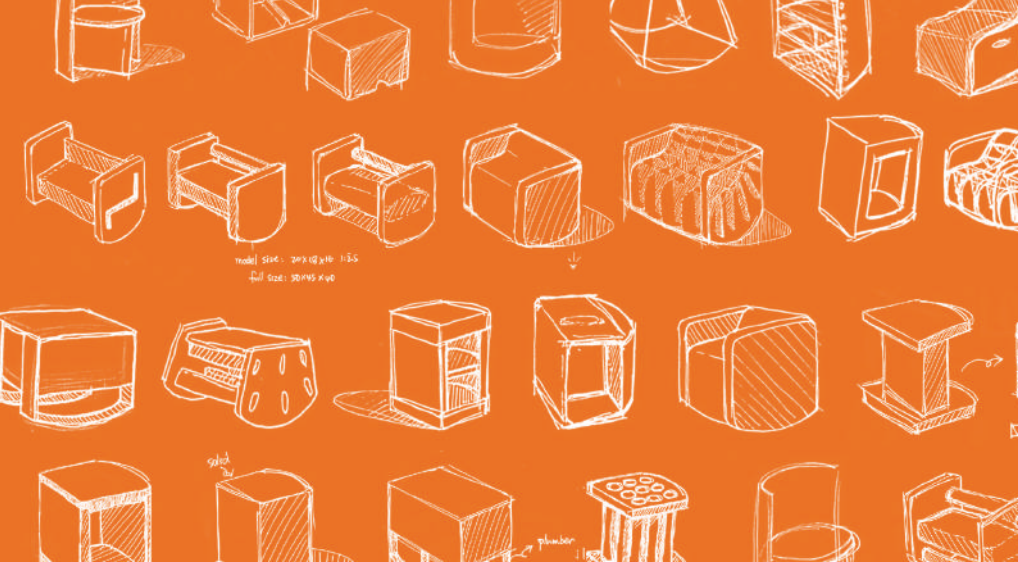




QING ZENG

qingzeng1997@gmail.com

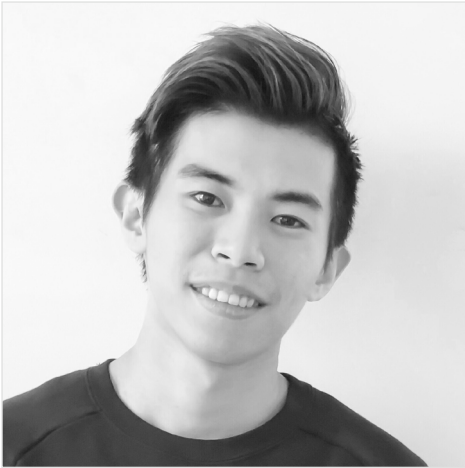




MOTI

Moti is a multi-functional chair which is designed for prison cells in the UK. Because prisoners have to spend a long time inside their cells and facilities are very limited, Moti Chair aims to provide more functionality. Moti can be used as a study chair, rocking chair, low desk, storage and more. It is mainly made of corrugated cardboard because it is recyclable and low cost. The manufacturing process is simple so that prisoners can have a chance to get involved in the production.





SIWAI (WESLEY) LEI

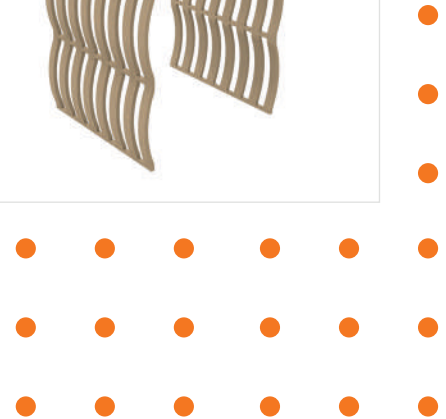
wesleyhaha0730@gmail.com
@E_MODEA





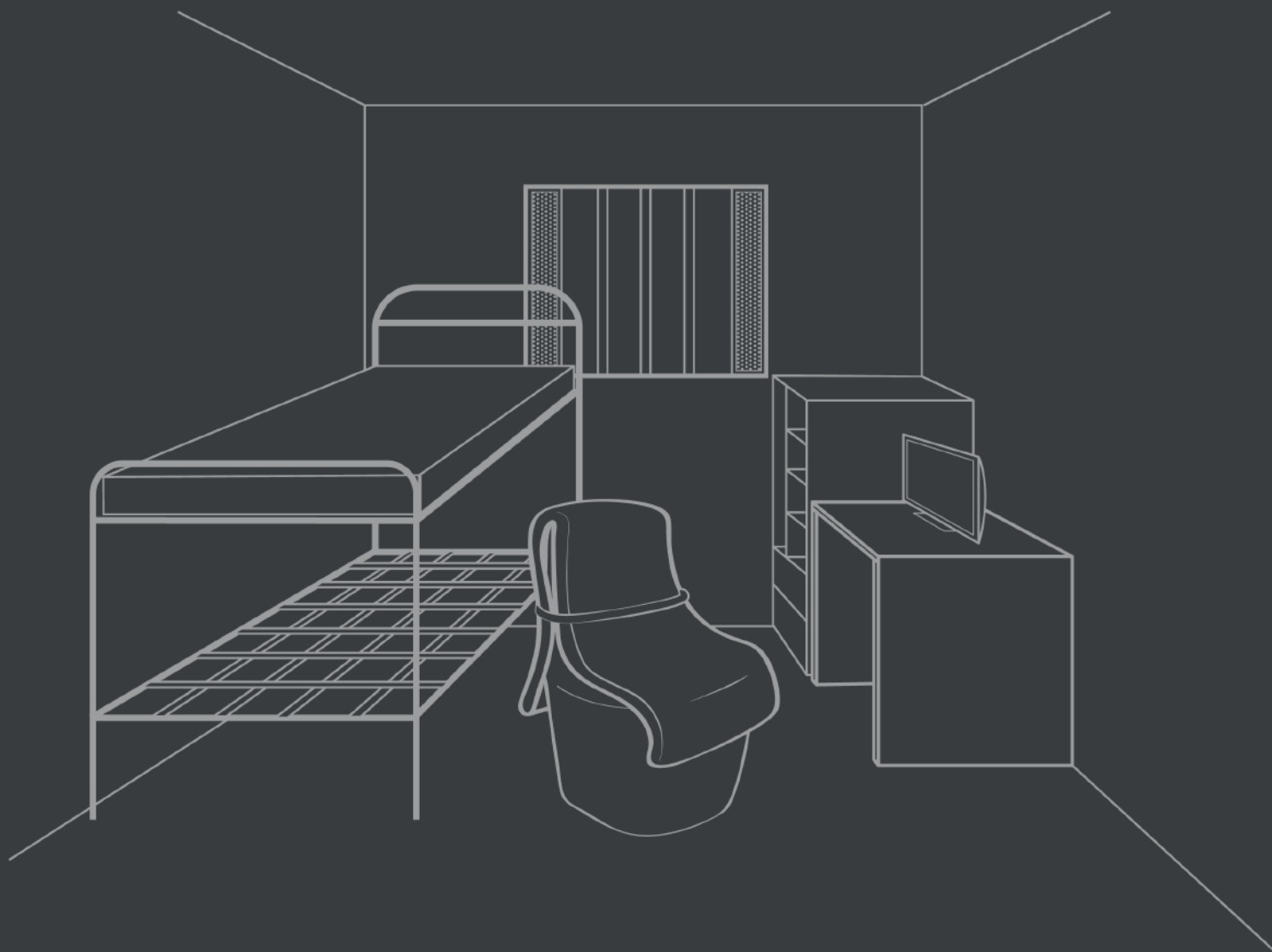
UP

Reflecting on the diversity of people's hobbies and needs, I asked myself: what if we could build our own storage system in the simplest and quickest way? UP is a customizable cardboard storage system that aims to prevent self-harming and maximize storage in a small environment. It has two main components: the square storage unit and the wardrobe. These can be stacked together like LEGO. Each of the units is laser cut from a flat sheet of 15mm thick cardboard and easily folds into shape. No screws or nails are required. And because cardboard is neither sharp nor hard, it can be used in some segregation units and hospital units.



“Some people would get the old [mattresses] and use them to make the chairs into some sort of a one-seater sofa. That’s basically what we use them for.

Daniel, Returning Citizen



PABLO CHAIR

The Pablo chair is a piece of furniture combining a desk chair and a lounge chair. Overcrowded cells, lack of space, and overuse of mattresses to compensate for the lack of comfort are major problems faced by prisons daily. Made from organic materials, Pablo offers two comfortable chairs: a rigid one made of bioplastic to suit studying or eating activities, and another soft one made of PVC/nitrile foam covered in Neoprene, suitable for reading or watching TV. By slotting into one another, Pablo takes up less space, while providing a seat for each prisoner and giving a sense of belonging to its user.





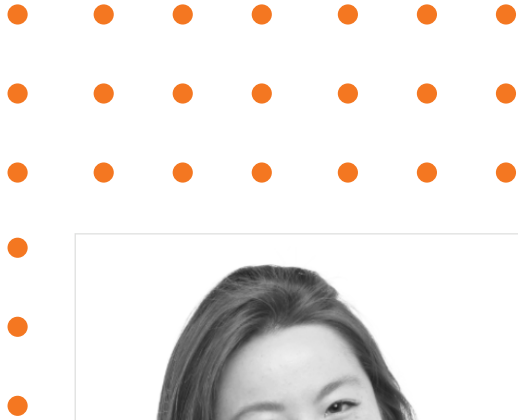
PAULINE COATALEM

p.coatalem@gmail.com

<https://www.linkedin.com/in/pauline-coatalem-290592113/>

@PaulineCoatalemdesign





STEPHANIE LAM

lstephmel@gmail.com

www.linkedin.com/in/stephanie-lam-160923130/

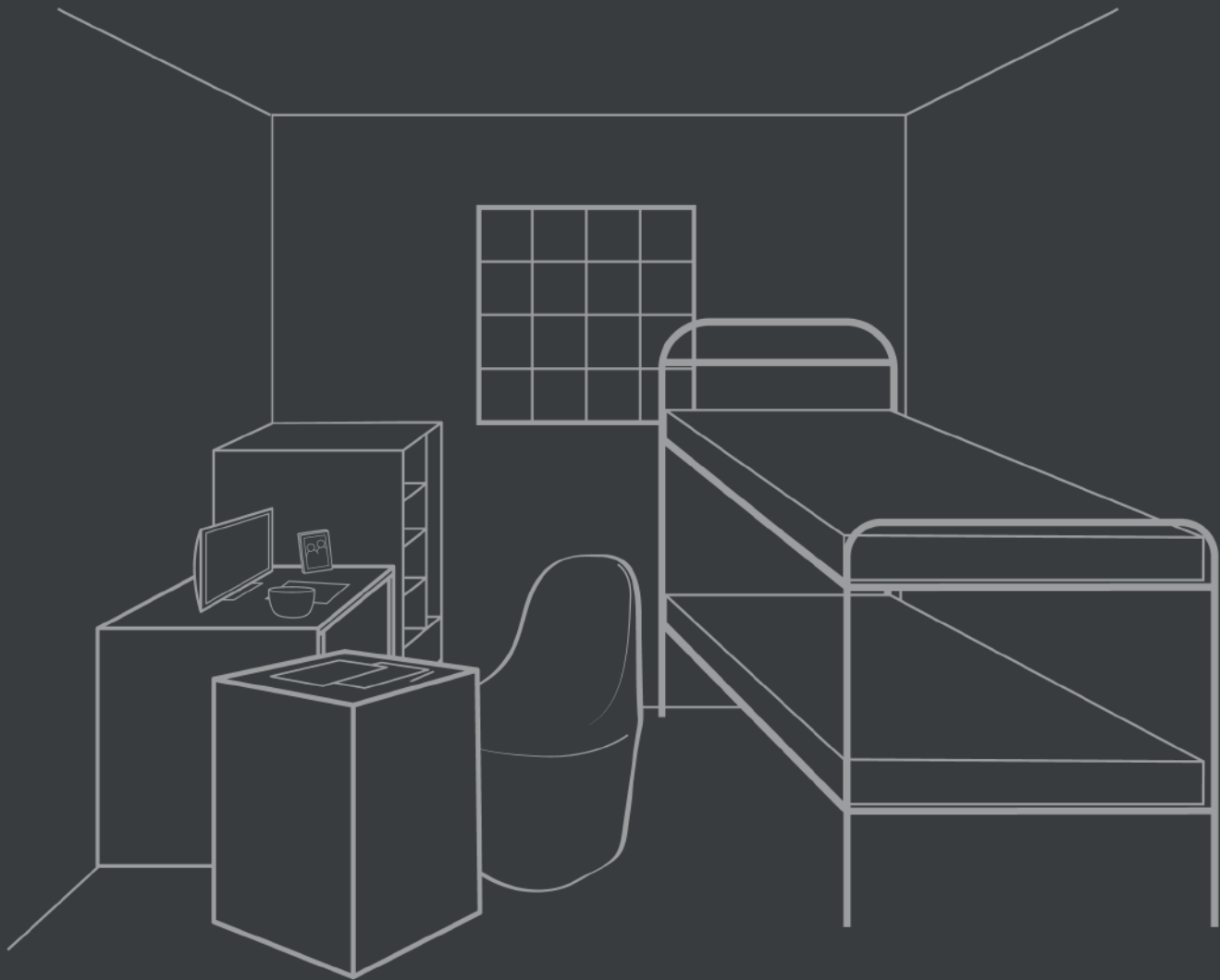
LOUNGE CHAIR

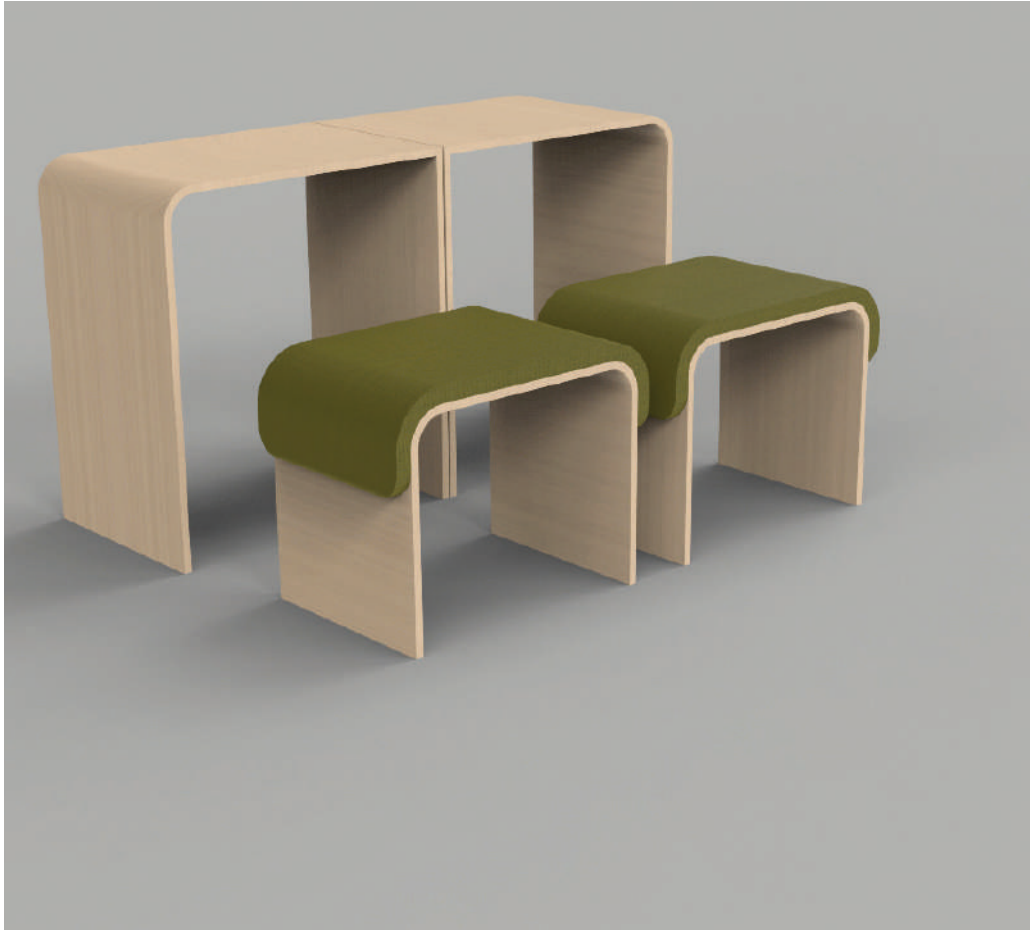
This plywood work and lounge chair is designed to replace the old prison chair model. It consists of a chair and a footrest which can be packed away by slotting it in the chair frame. Due to the limited space in prison cells, there is often not enough room for prisoners to stretch their legs, so not only does it function as a normal sitting chair, it also transforms into a lounge chair when the footrest is used. The vinyl cover can be rolled up and fitted into the chair when not in use. This cover is made of recycled PVC from old mattresses which would create more jobs for prisoners. Finally, the chair's hollow frame solves the issue of drug concealment and the round corners prevent prisoners from attacking each other with the chair.



“ Over the years you amass. You have a lot of paperwork a lot of documents: legal, studies, personal artefacts, letters, etc. I don't know what you're like but when I'm studying I like to feel like I have order and a system otherwise my head feels a bit messy; and when you're living out of bags... it's difficult to describe the lingering sense when you're less than organised and less than prepared – always on your back foot.

Nicolas, Returning Citizen





ASLI KAYGUSUZ
aslikaygusuz1@gmail.com

A|PART

In the prison context, having to share furniture in a cell can create conflicts and arguments between cellmates as ownership of furniture is a contentious issue. A|PART is a modular furniture set that allows inmates to feel the individuality of using furniture, by giving them the option to separate elements and to position them in various ways depending on the task. Through the use of birch plywood and organic shapes, A|PART aims to decrease the austere feeling of cell furniture by bringing natural characteristics into the prison context.





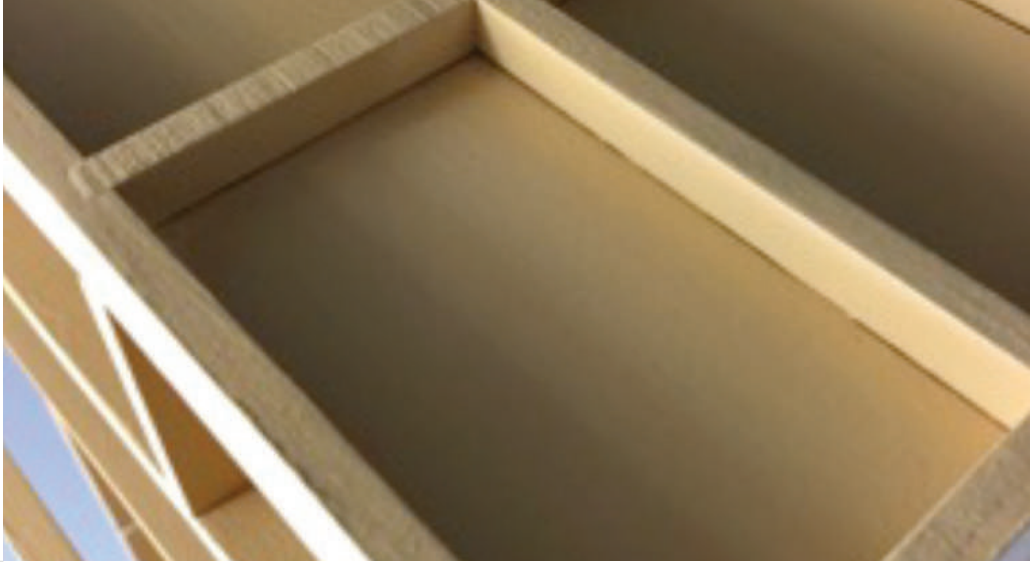
3 IN CUBE

3 IN CUBE is a set of 3 modular cubes that each have a purpose. The Gym Cube can be used to do exercise, the Chair Cube can be used like a chair, and the Keep Cube can be used to store belongings. However, all cubes can be used for storage. The set of 3 cubes can be placed in various positions to allow inmates to personalize their space. Additionally, all three cubes can be placed under the bed to save space. Thanks to the colour and flexibility of the cubes, 3 IN CUBE brings some joy and a sense of home to this small space.



INÈS ATTIEH
attiehines@icloud.com





SPACE SAVER

Space Saver is a multi-functional, space saving, all-in-one storage system that helps prisoners organize their belongings. Prisoners need hanging systems, especially for their laundry (wet towels, socks). This design satisfies their needs with hangers and customizable shelves that save space. The storage is made of recycled plastic lumber that is less flammable than timber and stronger than MDF. The bottom shelf is painted with an anti-bacterial charcoal paint which provides air purification. It's a smart piece of storage furniture that would benefit the prison cell environment.

LEAH (HYEJIN) LEE
leahlee0327@gmail.com





NILOO ALAGHBAND
nilooalaghband@gmail.com





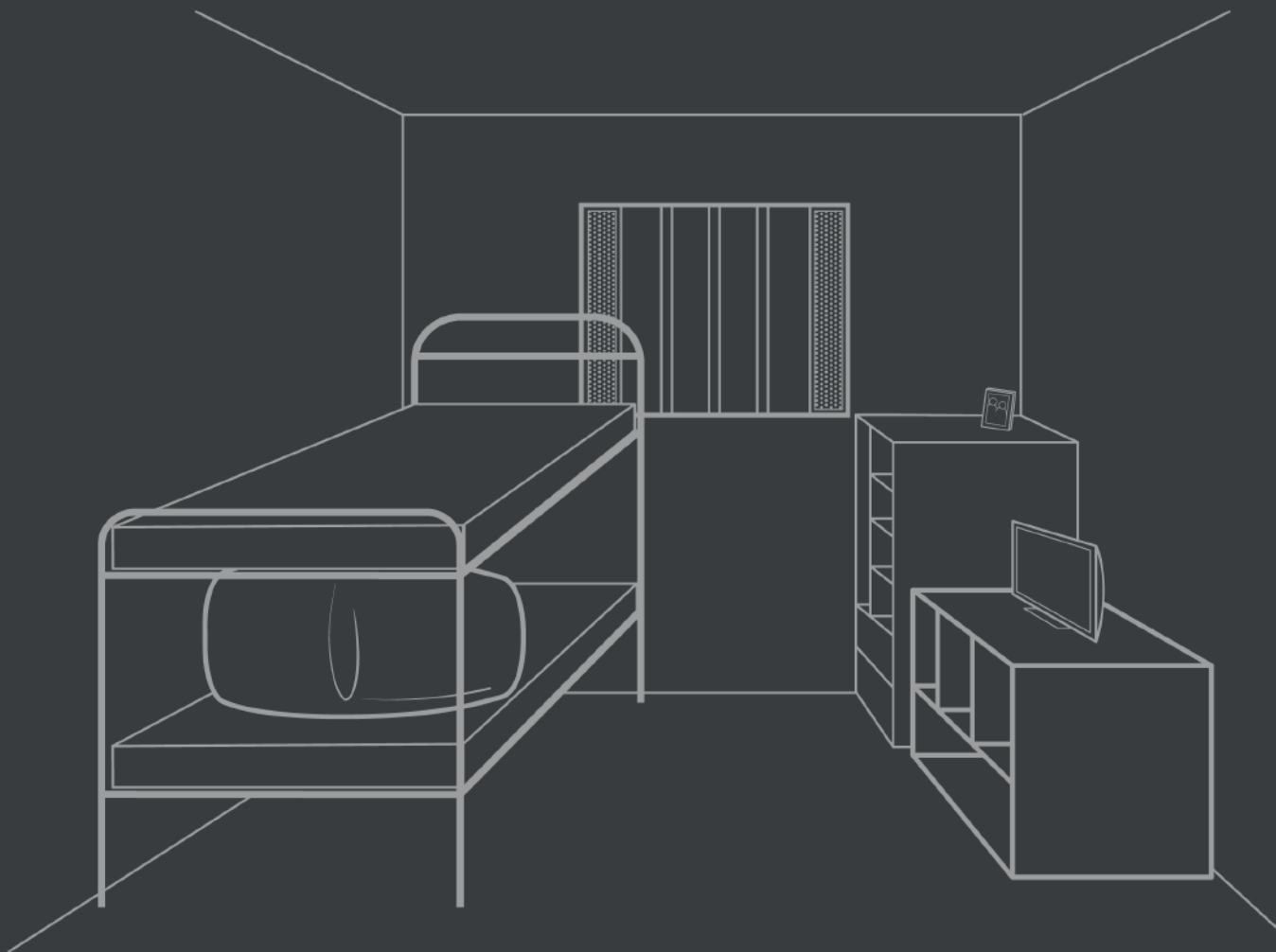
ARCHIVE

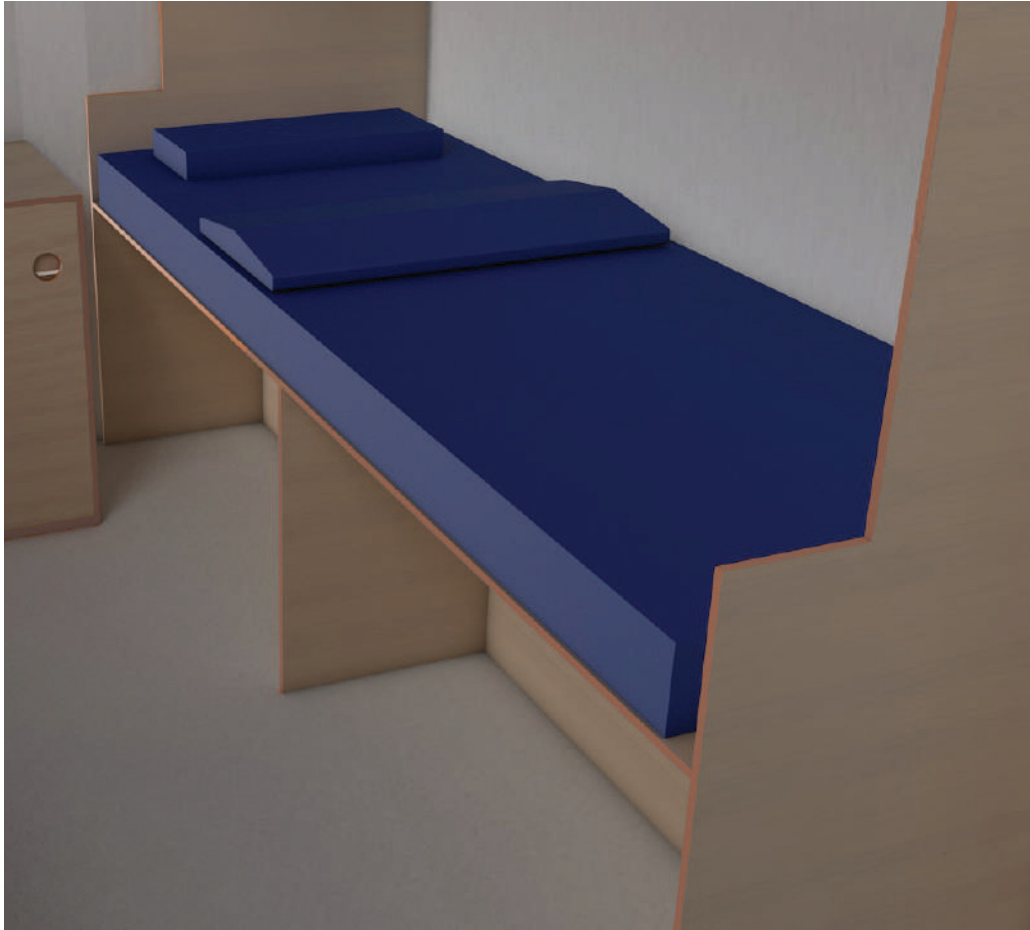
The Archive shelving system addresses the problem of prisoners overcrowding their cells with personal belongings, which in turn creates difficulties for staff during routine searches. The lack of personal space in cells has also been taken into account, with the design featuring a privacy panel separating both desk spaces. This encourages a more functional and productive work space, but also fosters morale and wellbeing. Customisation and personalisation encourages prisoners to engage mentally with their space, by seeking more creative solutions to storing or displaying their personal items. More importantly, Archive considers the prisoner as a curator of his collection, ultimately giving value to the furniture and reducing the risk of abuse.



“ I got a sciatica from exercising too much in the cell. I couldn't lie back with my legs straight. I'd put a chair on the bed and put my legs up on it to have less pressure.

Errol, Returning Citizen





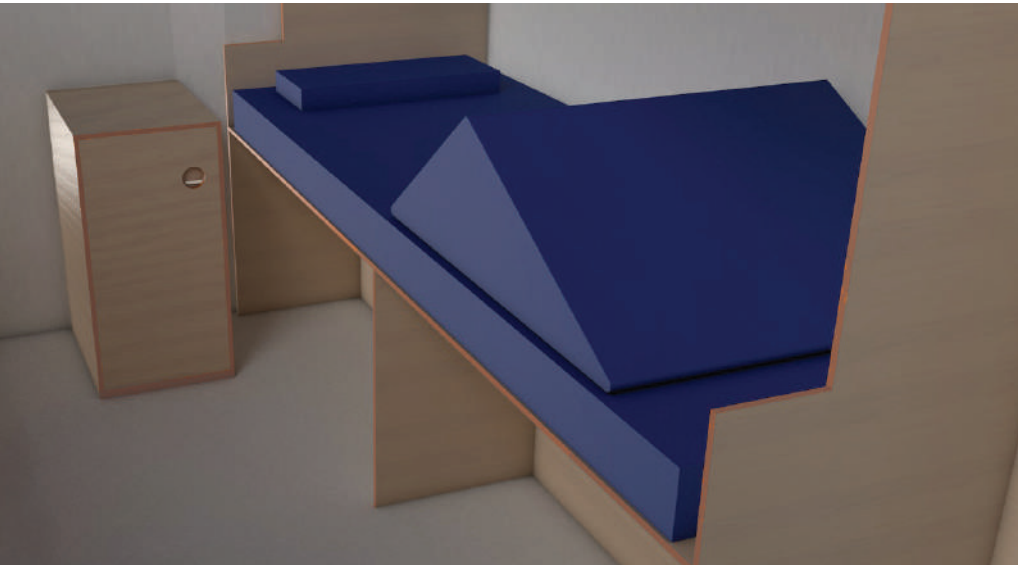
KEVIN MEHMETI

kevinmehmeti@hotmail.co.uk

www.linkedin.com/in/kevin-mehmeti

THE COMFORT COLLECTIVE

The Comfort Collective is a series of flame-retardant support cushions for the bed, that are designed to create comfort when inmates may feel discomfort, or even pain. The supports are ergonomically designed to tackle discomfort in the three most common areas of the body: the head/neck, the lower back, and the legs. Within these three areas, there are a total of three different sizes, as well as three different foam densities in order to create as much of a versatile range as possible.





KRITAPAT PORNPIPATPAISAN

wynn_pooh@hotmail.com

ROLL ME

For many people in prison, staying fit becomes hugely important. When confined in a cell for 23 hours a day, some people focus on bodyweight training in order to maintain their health and improve wellbeing during their time in prison. Therefore, the Roll ME exercise chair is designed to replace ordinary prison chairs with exercise equipment. This allows prisoners to work out more efficiently without having to misuse cell furniture. It works in a similar way to a yoga ball and can also be used as a chair, providing comfortable seating.



3

SECTION 3:

RESEARCH

78	Cell as Empathy Thing
84	Evaluation
86	Conclusion
88	Who are we
90	Contributors
92	References
94	Bibliography

CELL AS EMPATHY THING.



For over 20 years, user centred design has required designers to sensitively engage with users of objects, products, services and systems, to understand their behaviours, needs and feelings (Koskinen et al 2003). We do this to ensure that any designs generated for these users respond to, often culturally specific, “people centred” requirements and values.

This user centred approach to design was made popular at the turn of the millennium by researchers like Fulton Suri and the IDEO consultancy. Fulton Suri (2003) stressed the need for “qualitative research to inform and inspire designers to create more useful and enjoyable things for people [they] may never meet”; and IDEO’s multi-disciplinary design teams often include psychologists and ethnographers within the design process to ensure that user needs are fully understood and respectfully addressed.

To understand user behaviours and needs, designers engage in user centred design research, including:

- * Observing people – looking at and listening to what they do.
- * Undertaking interviews: open, semi-structured and structured interviews and “contextual interviews”, a technique aimed at getting people to describe what they do when they are doing it, rather than describing it abstractly.
- * “Seeing up close” what values are – this could involve getting people to tell stories – perhaps through objects.
- * Exploring and empathizing with users’ feelings about aesthetics, ideas and objects in diverse ways.

Many different techniques have emerged to help designers empathize with the users of objects and to introduce this data into the design process. Cultural probes and empathy probes (Mattelmäki 2006), for example, have been designed so that people can collect and share detailed information about their daily lives. Schoolchildren taking photos of their school dinners, for instance, seems to have inspired Jamie Oliver’s disgust and his attempt at redesigning the way schools manage, produce and deliver food. Empathy is central to user centred design, in terms of both the affective (feeling) and cognitive (perspective taking) components of empathy. Primarily the designer is expected to know how people think about things, as well as how they feel about them. Kouprie and Visser (2009) suggest that empathic design research has four key phases. In the first stage the designer enters the user’s world in a willing way to experience and see it. The second stage “immerses” the designer in the user’s world, i.e. the designer wanders around in the user’s world, looking at everything from the user’s perspective. The third stage is to connect with the user’s world, to find meaning and emotional resonance through engagement with user activities. The fourth and final phase is “detachment”: the designer leaves the user’s world in order to design for the user.

The DACRC has adopted empathic user centred approaches, but has extended this focus beyond “use” to understand “mis-use” as well as “abuse” of objects, products, systems and services (see discussion by Gamman & Thorpe 2015). In such projects, it is common where we cannot easily access the world of criminals to try and act out scenarios – to build models and to utilize role playing or “body storming” techniques, usually associated with theatre, to get a better understanding of the user experience.

One of the reasons DACRC built a full-scale prison cell in the BA Product Design studio at Central Saint Martins is because it was not easy to get students into prison to experience the cells where prison furniture is used. Although our research team had provided lots of ethnographic data about prison furniture and its use, misuse and abuse for students to draw upon, we felt that empathic experiences would help the designers generate original and nuanced insights. So, we built the cell (see Fig 1) to offer students access to a proxy experience. The cell allowed students to emotionally engage with confined spatial layouts and the functionality of existing prison furniture. The point was to help students empathically connect with prisoners' experiences by using the cell and to generate and test out the new designs featured in this catalogue.

The "Studio Cell" is an "empathy thing", defined as a "socio-material assembly" (A.TELIER 2012) that induces empathy within those that experience it. Other examples include the architectural group Rideout, who in 2010 created a cell in a public space in order to raise public awareness of overcrowding in prison (see Fig 2). Similarly, in 2015, Clare Patey of the Empathy Museum curated "A Mile in My Shoes" – an interactive shoe shop housed in a giant shoebox (Fig 3) that allows participants to hear the stories of others whilst walking a mile in their shoes.

Such empathy things, including our own prison cell, may foster experiential learning and empathy, particularly cognitive empathy, offering a perspective that may help individuals and students understand what it is like to spend time inside a cell, before attempting to design furniture that might go in it. The cell experience clearly has value for the students. In fact, student feedback was positive, with comments including the following:

"Personally, I think the cell made us empathise with how the prisoners feel because none of us actually lived inside [in prison] before. We acted out different scenarios of different issues and problems. From there we had a better feeling – not as much as prisoners – but more than without. The mock up cell also helped us a lot by putting our projects in and thinking within the space and what we can do with it." Alfred

"The role play in the cell definitely helped us to empathize with the inmates with different circumstances and situations that they might be in, conflicts etc. Testing one to one models in it was also evidently a big chance because we had a one to one cell." Asli

"The cell helps you realise the austere environment they live in and that freedom isn't the only thing that is taken from them, they spend so much time in there." Ana

But it is unlikely that our students would have really understood the prison context without meeting a number of ex-prisoners (including ex-lifers) who visited us at Central Saint Martins to talk poignantly about their lives, having spent a great part of them in prison. Whilst the cell as an "empathy thing" adds some real use-value to our design project, deep empathic experiences that raise strong feelings (affective empathy) and emotional connections can only usually happen after direct contact and exchange between people.



Fig 1



Fig 2

The Empathy Museum presents

a Mile in my Shoes



Please do come into our shoe
shop and try walking a mile
in someone else's shoes — literally

Open 12pm—6pm, Wed—Sun
4—27 September

Co-commissioned for Totally Thames 2015
with support from Wanda One UK
Nine Elms Vauxhall Partnership & Vauxhall One
www.empathymuseum.com
www.totallythames.org www.onenineelms.com

**Empathy
Museum**

**TOTALLY
THAMES**

**万达集团
WANDA GROUP**



Fig 3

WHY BUILD “EMPATHY THINGS” LIKE PRISON CELLS?

Empathy things conceived to create experiences that can inform designers have a more profound implication when experienced beyond design. Empathy things can create empathic experiences that help educate the wider public about the experience of prisoners. Barack Obama (2007) famously wrote about an empathy “deficit” and the need for the human race to have more empathy for each other as well as the planet. The economist Jeremy Rifkin (2010) has similarly made the case for the need to build empathy. Rifkin suggests that capitalism and the pursuit of materialism stunt empathy and fostering more of it could help bring people together to co-operatively solve global problems. His book, however, fails to provide sufficient evidence of precisely how increased empathy can be created and lead to cultural or political change, nor does it discuss whether there is a role for design. Baron-Cohen’s (2012) clinical work on autism and psychopathology suggests that only 2% of the population experience what he describes as “zero degrees of empathy”. This has led to a discussion about whether we should take opportunities to build more empathy

in the remaining 98% of the population, perhaps by creating experiences that can help build this faculty that is not evenly distributed in individuals. Cultural theorist Roman Krznaric has led debates for the Royal Society of Arts about the need for society to build empathy and has argued for the need to mobilize co-operation and imagination in order to develop more “outrospection” between individuals as well as empathetic experiences/perspectives that can help address the complex challenges that society faces, not served well by individualism. We believe that “empathy things” can help address the empathy deficit, by design. However, the quest for empathy should not be uncritical. Whilst Peter Bazalgette’s *The Empathy Instinct* (2017) makes a strong case for why the arts can help promote empathy, he notes that biological instincts mean that empathy is not “neutral” and that we tend to have empathy for people we recognize as most like ourselves”. Paul Bloom (2016) uses this fact as a reason to suggest empathy is not always a reliable trope to work with, and can lead to inequality. This is because he views it as a capricious and irrational emotion, and suggests “distanced rational compassion is a more reliable tool to base decisions upon than empathy and... we should not over focus on this emotion”.

EVALUATION.

WHY EVALUATE THE CELL FURNITURE PROJECT?

Although the student design work found in this catalogue is a very small component of the Cell Furniture design research project, it will nevertheless be subject to evaluation. Project evaluation typically focuses on two key questions: 1. Does the project work? and 2. How can the project be improved?

The Cell Furniture project is being evaluated by social scientists from the Institute for Community Research and Development at the University of Wolverhampton. The key aim of the evaluation is to investigate if and how the project is developing better conditions for a safer and more productive environment, and to identify any barriers to success through a process and impact evaluation.

Impact evaluation: Evaluation of impact investigates whether changes are happening as a result of the project. For example, do prisoners and staff feel better and safer as a result of being involved in the Cell Furniture project? Do the new furniture designs promote wellbeing and safety? The evaluators work with participants (prisoners & prison staff) to gain an in-depth understanding of their experiences, and then place these findings within the appropriate research evidence base and policy context. This element of the evaluation is also interested in testing how robust the new designs are.

WHY IS EVALUATION IMPORTANT?

Evaluation is important to understand whether a project or programme of work is having an impact and achieving the desired outcomes. Evaluation is also important to ensure project activities are as effective as they can be. Evaluation should identify what areas of a project work particularly well, what could be improved, what factors facilitate success, and what barriers might exist. It is also important to evaluate projects to see if there are any unintended consequences that have occurred as a result of the project. This is particularly necessary in the criminal justice system, where getting things wrong can have significant consequences for the wellbeing, safety, and risks to prisoners and prison staff.

WHAT ABOUT THE LONG-TERM SUCCESS OF THE CELL FURNITURE PROJECT?

A limitation of the Cell Furniture project is that the relatively short duration (18 months) limits the opportunity for longitudinal evaluation of outcomes linked to the furniture's contribution to improving safety, security and wellbeing. To overcome this, the evaluation team intend to establish baseline data collection protocols that will allow for follow-up data to be collected in the future to understand the longer-term impact of the project.

WHAT WILL HAPPEN TO THE FINDINGS FROM THE EVALUATION?

The evaluation will provide evidence of the effectiveness of the project, and any barriers to success. The evaluation will also serve to provide a record of the development of this innovative way of working in prisons, and will therefore provide important learning for stakeholders and external audiences. This will be important for the continued development of the programme and will provide important learning for HM Prison Service and the MoJ. The evaluation findings and learning will be translated into clear and practical recommendations. The evaluation team will work with the Cell Furniture project team, HM Prison Service, and the MoJ to develop a dissemination strategy so that the findings reach appropriate policy and practice forums, to ensure the findings are heard and have impact. With the approval of HM Prison Service and MoJ, findings will be shared – publishing the report in academic and practice journals, presenting at conferences and events, and through the ICRD blog.

CONCLUSION.

At the Central Saint Martins Degree Show Two: Design, 19 – 23 June 2019, and in this catalogue, the DACRC in partnership with BA Product Design and HMPPS have presented initial research findings as well as the first experimental designs created by students for new cell furniture to be made in prison.

DACRC will follow up the June 2019 showcase with a further design exhibition that we anticipate will take place in Spring 2020 of outputs from a collaborative second design stint with prisoners (that took place in May 2019) to showcase development of designs with inmates at HMP Standford Hill. At the yet to be developed Spring 2020 cell furniture exhibition, DACRC and the MoJ will showcase the final student designs selected from the 2019 show in response to the furniture design dilemmas identified in prison. The 2020 show will also feature designs from prisoners and the DACRC team which will include designs from senior Central Saint Martins furniture designer Rock Galpin.

HMPPS are considering redesigning all furniture in the prison estate and consequently producing more sustainable furniture supplies in the future, perhaps linked to a sustainable circular economy approach. The ambition is that all new furniture concepts and designs produced for use in UK prisons will be manufactured and ultimately recycled in prison.

Jason Swettenham, Head of Prison Industries at HMPPS, commented:

“In the Spring of 2018 I sought an academic partner to assist me in designing a new sustainable range of cell furniture to use across the prisons in England and Wales. The opportunity to design furniture for use in some of the most complex and challenging environments in the UK was one that Professor Gamman and the Central Saint Martins DACRC and furniture design team jumped at. From the outset I was clear that the best design solutions would come from a collaborative approach and that this ‘co-design’ work must fully engage prisoners – as after all they would be expected to live with it, as well as prison officers, Governors and my manufacturing team.”

BA PRODUCT DESIGN

BA Product Design believes product design solutions should meet the wants and needs of real people. Since its first introduction as a discrete subject area, the professional practice of the Product/Industrial Designer has evolved to reflect other changes in manufacture, consumption and the wider concerns of society. Most recently, this has informed a shift in the focus of BA Product Design students' activities away from a purely market-orientated and problem-solving approach to a more analytical and critical approach. This accommodates an increasingly complex series of reference points including those provided by related and emerging disciplines such as sociology, politics, ethics, interaction design, service design, and experience design.



Paul Sayers
Stage 3 Leader



Jackie Piper
Associate Lecturer

DESIGN AGAINST CRIME RESEARCH CENTRE

Design Against Crime is a practice-led design research project that emerged at Central Saint Martins. The Centre's focus is based on the understanding that design thinking, as well as design practice, can and should address security issues without compromising functionality and other aspects of performance, or aesthetics.



Dr. Lorraine Gamman
Founder and Director



Adam Thorpe
Co-director



Zoé Kahane
Designer, Researcher
& Project Coordinator



Jeffrey Doruff
Designer, Researcher
& Project Coordinator



Pras Gunasekera
Project Coordinator



Catherine Boyd
Material Specialist



Elsa Bardout
Designer



Rock Galpin
Senior Furniture
Designer



Carlotta Allum
LDoc funded PhD
Student, Charity
Director and Researcher

CONTRIBUTORS.

HER MAJESTY'S PRISON AND PROBATION SERVICE

Jason Swettenham

Head of Prison Industries, Catering, Retail and PE (PSPI)

Jason Errington

Head of Operations, Catering, Retail & PE (PSPI)

John Rigden

Operations Manager, Catering, Retail & PE (PSPI)

Ian Hughes

Operations Manager, Catering, Retail & PE (PSPI)

David Turner

Design Specialist, Catering, Retail & PE (PSPI)

Abdul Majid

Head of Plastics, Catering, Retail & PE (PSPI)

Mark Simpson

National Lead: Fire Safety, Prisons Directorate

Alistair Davidson

Custodial Manager, HMP Stanford Hill

Phil Monahan

Custodial Manager, HMP Pentonville

Sarah Bourn

Respect and Decency Lead, HMP Pentonville

PROJECT WEBSITE

Design Against Crime created a cell furniture website as both an informational and design resource for HMPPS and Central Saint Martins student designers. Its content captures a variety of quantitative and qualitative information ranging from data on existing cell furniture and visualisations of the scenarios of use, misuse and abuse of cell furniture, to crime prevention techniques and interviews with ex-offenders and prisoners. Due to the nature and confidentiality of the content, the website in its current iteration is limited to a select audience.

KEY REPORTS & WEBSITES

Publicly accessible information and inspection reports about HMPPS that contributed to this project's research can be found at:

<https://www.justiceinspectorates.gov.uk/hmiprison/inspections/>

<http://www.prisonreformtrust.org.uk/Publications/Factfile>

BIBLIOGRAPHY:

A.TELIER (Project) (2011). *Design Things*. Cambridge, Mass: MIT Press.

Baron-Cohen, S. (2012). *Zero Degrees of Empathy: A New Understanding of Cruelty and Kindness*. London: Penguin.

Bazalgette, P. (2012). *The Empathy Instinct: How to Create a More Civil Society*. London: John Murray Publishers.

Bloom, P. (2016). *Against Empathy: The Case for Rational Compassion*. New York: Ecco Press.

Fulton Suri, J. (2003). 'Empathic Design: Informed and Inspired by Other People's Experience' in Koskinen, I. et al (eds) *Empathic Design: User Experience in Product Design*. Helsinki: IT Press.

Gamman, L. & Thorpe, A. (2016). "Design for Empathy" – Exploring the Potential of Participatory Design for Fostering Restorative Values and Contributing to Restorative Process in Gavrielides, T. (ed) *Offenders No More: An Interdisciplinary Restorative Justice Dialogue*. NY: Nova Science Pub.

Gamman, L. & Thorpe, A. (2015). 'What is "Socially Responsive Design and Innovation"?' in Sparke, P. and Fisher, F. (eds) *Routledge Companion to Design Studies*. Abingdon: Routledge.

Koskinen, K.U. et al (2003). 'Tacit Knowledge Acquisition and Sharing in a Project Work Context', *International Journal of Project Management*, vol 21, issue 4, May 2003, pp 281–290.

Kouprie, M. and Visser, F.S. (2009). 'A Framework for Empathy in Design; Stepping Into and Out of the User's Life', *Journal of Engineering Design*, vol 20, no. 5, October 2009, pp 437–448.

Mattelmaki, T. (2006). *Design Probes* (PhD), University of Art and Design, Helsinki.

Moore, P. and Conn, C.P. (1985). *Disguised: A True Story*, W Publishing Group.

Obama, B. (2007). *The Audacity of Hope: Thoughts on Reclaiming the American Dream*. New York: Crown Publishers.

Patey, C. *A Mile in My Shoes*, Empathy Museum. See: <http://www.clarepatey.com/projects/a-mile-in-my-shoes>

Rideout, Go to Jail project. See: <http://www.gotojail.info/about.aspx>

Rifkin, J. (2010). *The Empathic Civilization: The Race to Global Consciousness in a World in Crisis*. London: Penguin Putnam.

CELL FURNITURE, DESIGNS FOR SAFETY, WELLBEING, AND SUSTAINABILITY, 2019

DESIGN AGAINST CRIME RESEARCH CENTRE

Dr. Lorraine Gamman, Founder and Director

Adam Thorpe, Co-director

Zoé Kahane, Designer and Project Coordinator

Jeffrey Doruff, Designer and Project Coordinator

Catherine Boyd, Material Specialist

Elsa Bardout, Designer

Rock Galpin, Senior Furniture Designer

Daniel Chapman, Logo Designer

BA PRODUCT DESIGN, CENTRAL SAINT MARTINS

Paul Sayers, Stage 3 Leader

Jackie Piper, Assistant Lecturer

Aleks Vuko

Alfred Low Wei Leong

Ana De Pellegrin

Asli Kaygusuz

Hafeez Dawood

Henry Yun Huang

Inès Attieh

Kevin Mehmeti

Kritpat Pornpipatpaisan

Leah (HyeJin) Lee

Niloo Alaghband

Pauline Coatalem

Pietro Fareri

Qing Zeng

SiWai (Wesley) Lei

Stephanie Lam





ual: central
saint martins

