Where the Silence Speaks: A Participatory Design Journey with Mothers in Custody

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Abstract

This project reimagines correctional spaces through a human-centered participatory process with pregnant women and mothers in custody, among the most vulnerable in the justice system. Using the Creative Pragmatic Co-Design framework, the team developed accessible tools that allowed participants to express often-overlooked spatial needs such as privacy, emotional safety, and infant care. The resulting mother-and-child facility prototype was officially recognized by the Central Women's Correctional Institution for future policy and budget planning. The project has since expanded to post-release facility design, public exhibitions, university teaching, and a toolkit adaptable to other marginalized groups. Honored with two national awards, the work shows how design can restore dignity, reshape institutional mindsets, and serve as a strategic tool for justice reform, transforming both space and the lives within it.

Background to the Research Project

Although Thailand played a key role in initiating the Bangkok Rules, an UN-endorsed framework for the treatment of women prisoners, their implementation at the environmental and spatial level remains limited, especially for pregnant women and mothers with infants in custody. These individuals face intersecting vulnerabilities: physical, psychological, and social.

This group is among the most marginalized in correctional facilities. They not only endure the physical demands of motherhood, but also internalized silence and social stigma. Designing spaces for them becomes more than a logistical challenge, it becomes an act of restoring dignity. This research emerged from the question: How can we design spaces that uphold human rights, support motherhood, and foster child development within a system defined by control? [7]

The project proposes a prototype mother-and-child facility, grounded in the Bangkok Rules and shaped through participatory design with the women themselves. Rather than imposing solutions, the process invites them to co-create environments that reflect their lived needs. The project revealed that when design tools, methods, and space are intentionally structured, vulnerability can be softened. Participants began to see themselves not as passive recipients, but as authors of change.

Ultimately, the outcome is not just architectural documentation, it is a human-centered design process that restores agency to those long unheard. It reimagines what correctional spaces can be: not places of punishment, but environments where dignity, voice, and possibility are restored.

Conceptual Framework and Implementation Approach

This research applies the Creative Pragmatic Co-Design framework, developed for highly constrained environments such as women's correctional institutions. The approach focuses on two goals: creating accessible design tools and fostering psychologically safe spaces where participants can express their needs. Here, design becomes a means to restore agency, not just gather information [18].

The team collaborated with diverse stakeholders; correctional staff, designers, students, formerly incarcerated women, and human rights experts. Three tools were created; a routine mapping chart, an activity-



needs diagram, and a small-scale layout model. These tools prioritize visual and tactile interaction to ensure accessibility for participants unfamiliar with design or formal language [13].

Picture 01: (left) The research team conducted interviews with correctional officers to encourage them to support incarcerated women in confidently expressing their genuine needs.

(rigth) The Creative Pragmatic Co-design tools were pilot-tested with formerly incarcerated women to refine and improve them before being used in the actual data collection process.

This method, tailored to the Thai correctional system, enables participants to articulate spatial needs with confidence. In a setting marked by strict rules and communication limits, such tools unlock creative expression from those who are rarely heard. Working with vulnerable groups like pregnant inmates and mothers required strict adherence to research ethics. The project received formal ethics approval, and participants were clearly informed of their rights, with strong attention to psychological safety throughout.



Picture 02: (left) The team collaborated directly with pregnant inmates and mothers with infants through a participatory design process.

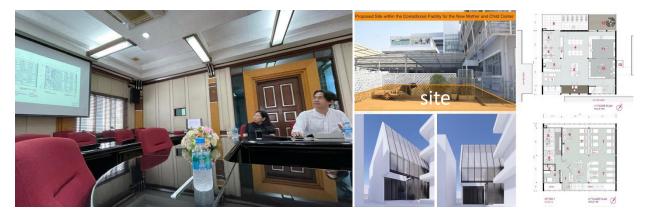
(rigth) The outcomes of these collaborative sessions were translated into architectural proposals and spatial layouts.

One of the greatest challenges was breaking through what the team called an "architecture of silence", the internalized belief that one cannot speak or imagine better conditions. Building trust and inviting participation as co-creators was essential. The outcome was far more than data collection. It was a genuine creative collaboration where all voices shaped spaces of care, dignity, and hope. They were not only transformed environments but also reshaped how the women saw themselves.

Findings and Impact

This project went beyond architectural drawings. It became a process of restoring dignity to incarcerated mothers. Participants co-designed spaces to meet deeply personal needs: private breastfeeding areas, flexible sleeping zones, child play areas that adapted to time, and quiet corners for emotional healing. While such needs may seem ordinary outside prison, they are rarely acknowledged in environments defined by surveillance and control. Validating these needs through design became a powerful affirmation of voice and humanity.

The project was formally recognized at the policy level. The Director of the Central Women's Correctional Institution invited the team to present their co-designed proposal for use in budget planning and future implementation, a rare example of participatory design influencing correctional infrastructure [11]. Beyond transforming space, the project shifted institutional mindset, prompting prisons to see architecture not just as control, but as care. It helped reframe discourse from discipline to dignity.



Picture 03: The design team formally presented the prototype of the new Mother and Child Center to correctional authorities.

The research also reached the public and educational realms. Architecture students worked on real-world design challenges, culminating in exhibitions such as Walls to Welcome [14], Blurred Memory [15], and HerStory [17]. Held in public spaces like malls and galleries, these exhibitions invited empathy and dialogue around prison motherhood issues often left unseen. Ultimately, the project shows that transformative design begins by listening, to needs long silenced, and building processes that allow those voices to shape lasting change.

Expansion and Sustainability

Following the core research phase, the project has expanded in several key directions. These include the development of post-release confinement design concepts [6] [12] and collaborations with policy-level agencies such as TIJ, the Office of Justice Affairs, and the Department of Corrections to promote the broader agenda of design for justice. The project has also been published in the CoDesign journal and integrated into university-level curricula. In addition, the team developed a Creative Pragmatic Co-Design Toolkit featuring visual, tactile, and participatory tools adaptable to other vulnerable groups; such as children, older adults, and individuals in restrictive environments. These ensure the scalability of inclusive and sustainable design principles [16].

Its long-term impact is reflected through two national awards; firstly, ASAIHL Thailand Outstanding Achievement Award 2024 (for social engagement) [10] and secondly, Distinguished Academic Award in the Social Sciences 2024 (Merit Award) [9]. These honors underscore the project's quality, consistency, and social relevance, highlighting its contributions to policy development, creative design practice, and education. Together, these developments confirm that this is not a standalone academic project but part of a growing ecosystem of design-driven justice initiatives; scalable across disciplines and institutions, and capable of transforming both environments and lives.

Timeline Portfolio (Eng)

Published in an 18 international journal

Title: From Passive to Creative: How Creative Pragmatic Co-Design Transforms Correctional Environments, Co-design Journal.

Impact the method (Creative Pragmatic Co-Design) was recognized as a genuine innovation for empowering incarcerated mothers to express their needs through participatory design.

Presented as an art exhibition

Title: "Herstory", an art exhibition at a morumental and historical site of Democratic Uprising of Gwangju.

Impact: Art became a platform for amplifying prison women's voices, bridging design, art, and justice.

16 Approach Aligned with

GCNT 2025: Creative Pragmatic Co-Design for Humanity-Centered Development: From Margins to Mainstream.

Impact: Creative Pragmatic Co-Design Toolkit is used to align design across scales (human-urban) with the SDGs.

Link: https://www.bu.ac.th/en/featured-stories/1991

Student Exhibition: "Blurred Memory"

Impact: Student exhibition connected prison realities with public space, shifting public understanding of motherhood behind bars.

LinkOt: https://www.nest. stories/1916 LinkO2:https://youtube/AXreBPhAFRO?ej=X-CxGt64rd8pu/7z

June 2025

July 2025

Presentation of the Center Design Proposal

Impact: The prototype of Mother an Child Center was presented to the Director of the Central Women's Correctional Institution, serving as a foundational step for planning and allocating an official construction budget.

Design proposal became a policy tool, potentially shaping real correctional facilities nationwide.

12 Published in Thai journal

Title: Post-Release Confinement Facilities. Journal of Thai Justice System.

Impact: Pioneered post-rele confinement design as part of Thailand's emerging "design + justice" discourse.

Link: https://so04.tci-thaijo.org/index.php/JTJS/article/view/27 5734

National Academic Conference Presentation

Impact: Framed prison as a learning space, and design as a human-centered innovation under constraints. Unic: https://drive.gogle.com/file/d/f/bj@JUOjDat762Xe68.jbsDU-LHOFOqh/sex

Student Exhibition: "Walls to Welcome: 14

Designing with Justice and Reintegration" Impact: in collaboration with the Thailand Institute of Justice (TJ) to introduced justice-focused architectural education, combining real-world collaboration and public discourse.

LinkO1: https://www.bu.ac.th/en/featured-

stories/1826 LinkO2: https://youtu.be/r5k38-uwxZA? si=W2pggoD9J5OfFO7G

March 2025

Award Recognition Socially engaged academic service

finning the ASAIHL Thailand Outstanding chievement Award 2024 for excellence in cademic service to society.

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Impact: This prestigious national recognition highlights the impact of the Mother and Child Center in Prison projec It is recognized by national-level justice agencies as practical and impactful.

April 2025

Award Recognition: Academic excellence

Receiving the 2024 Distinguished Academic Award in the Social Sciences (Merit Award), presented by the Association of Private Higher Education Institutions of Thailand.

Impact: Award signified integration of teaching, research, and engagement, validating future support.

Facility Design

Impact: The post-release confinement was presented offered a human-centered alternative to carceral control, ready for policy adoption and scale-up. Link:

https://mfacebook.com/story.php? story_fbid=pfbidOAEDCZLOFiBsMknCo boNvrJALpgs1sxQE9pAgfovSv4JstC8kr cZkH8qBY6HZ7ZfHl&id=100002657991 Research Report Submission Mother and Child Incarceration

The research funded by the Internal Research Grant for Academic Unit Development, King Mongkut's Institute of Technology Lackrabang (KMITL).

Impact: Sparked research and teaching around improving lives of incarcerated mothers.

December 2024

November 2024

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July 2024

Opening of the "Opportunity Space" Museum at Phathammarong Prison, Chiang Mai

Impact: It introduces design as a communicative tool for justice. Launched a new public conversation on dignity, incarceration, and reintegration through design.

Link: https://www.thelOl.world/tij-bu-arch/

Institutional Collaboration

The School of Architecture signed an Academic Memoranclum of Understanding (MoU) with the Thailand Institute of Justice (TJJ) in order to built a long-term alliance with national justice organizations, supporting future policy-oriented work.

https://www.bu.ac.th/en/arch/featured-stories/1125

Research Report Submission: Post-Release Confinement Facility Design

The research funded by the Research and Development Institute for Justice Process (RIDJP).

Attened the TIJ Executive

Program on the Rule of Law and Development

justice as a system, and inspired using design strategically within it.

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Link: https://www.tijthailand.org/en/highlight/d etail/tij-promotes-the-rule-of-law-for-development#:--text-Jacobs,public%20 presentation%20at%20the%20forum ****

Attened workshop for Emerging Leaders on the Rule of Law & Policy

Organised by Thailand Institute of Justice (TIJ) and The Institute for Global Law and Policy at Harvard Law.

Impact: This led to the founding of the "Design + Justice" framework and long-term scholarly direction.

Undergraduate Thesis Supervision

Served as the academic advisor for a Bachelor's degree thesis in architecture titled "Isarasathan: A Place for Those Who Have Erred".

Impact: Advising this thesis was the beginning of sustained engagement in justice-oriented architecture.

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[18] August 2025, Published in an international journal

Published in a Co-design journal title: From Passive to Creative: How Creative Pragmatic Co-Design Transforms Correctional Environments, Co-design

Impact: It was published in a leading international journal and received highly positive comments for its methodology, which promotes the active participation of vulnerable incarcerated women. The approach empowers participants to fully express their needs related to improving the quality of life for mothers and children in prison. The reviewers recognized this methodology as a genuine innovation in participatory research.

[17] August 2025, Presented as an art exhibition

Presented as an art exhibition: "Herstory" in the theme "The Positioning", an art exhibition of Thai Artists, at Jeonil Building 245, a monumental and historical site of Democratic Uprising of Gwangju.

Impact: This work amplifies the voices of women in prison through art, creating communicative space for voices that are often unheard or overlooked. It opens up a critical intersection where design, art, and justice converge—inviting the public to engage with difficult questions through creative expression.

Link: https://www.bu.ac.th/en/featured-stories/2011?preview=1756201452

[16] July 2025, Presenting a Research Approach Aligned with the SDGs

Presenting in GCNT 2025 title: Creative Pragmatic Co-Design for Humanity-Centered Development: From Margins to Mainstream

Impact: This presentation introduces the use of the Creative Pragmatic Co-Design Toolkit as a methodology for developing environments at multiple scales—human, architectural, and urban—in ways that are aligned with the Sustainable Development Goals (SDGs).

Link: https://www.bu.ac.th/en/featured-stories/1991

[15] June 2025, Student Exhibition: "Blurred Memory"

Student Exhibition: "Blurred Memory" 19 June to 10 August 2025 at the Mun Mun Zone, Seacon Square Srinakarin

Impact: The exhibition creates a public learning space through public pedagogy, where social justice issues are presented in an open, everyday setting. Students worked closely with in-depth materials provided by incarcerated women—such as personal diaries, narratives of loss, and reflections on raising children in prison. By juxtaposing the enclosed world of the prison with the public realm of the shopping

mall, the exhibition invites visitors to engage with the realities of prison motherhood, and fosters a new public understanding of human rights within carceral systems.

Link01: https://www.bu.ac.th/en/featured-stories/1916

Link02: https://youtu.be/AXreBPhAFR0?si=X-CxGt64rd8pu7Zz

[14] May 2025, Student Exhibition: "Walls to Welcome: Designing with Justice and Reintegration"

Organized in collaboration with the Thailand Institute of Justice (TIJ)

Impact: This exhibition marks a new dimension in architectural education by integrating the theme of designing for justice into the classroom and expanding it into the public sphere. The project has led to the development of experiential and project-based learning models, in which students engage with real-world challenges in collaboration with government agencies and justice professionals.

The exhibition serves as a compelling example of how knowledge and creative practice can be harnessed to transform public attitudes—positioning architecture not merely as a technical discipline, but as a medium for empathy, civic engagement, and systemic change.

Link01: https://www.bu.ac.th/en/featured-stories/1826

Link02: https://youtu.be/r5k38-uwxZA?si=W2pggoD9J5OfF07G

[13] May 2025, National Academic Conference Presentation

Paper title: "Design Guidelines for the Renovation of the Mother and Child Unit at the Central Women's Correctional Institution, Klong Prem" Presented at the 15th National Conference on Education: Real-World Learning Experience – Transforming Education through Innovation and Research-Faculty of Industrial Education and Technology, King Mongkut's Institute of Technology Ladkrabang (KMITL), 30 May 2025, 3rd Floor, Learning Innovation Building.

Impact: This presentation brought the issue of prisons and justice into the discourse of education and real-life learning, connecting the "closed space" of correctional institutions with the "open space" of academia. It highlighted the idea that "prison space" is also a learning space—for both mothers and their children—and a site for architectural design research led by students.

The design of the mother and child center is therefore not simply a matter of architectural intervention; it is an innovation in human learning under conditions of constraint.

Link: https://drive.google.com/file/d/15j9JU0jDsI176zXs6fLlbsDU-Lhf0FOq/view

[12] April 2025, Published in Thai journal

The article title: Post-Release Confinement Facilities. Journal of Thai Justice System, 18(1), 23–40. Impact: This article presents a new approach to post-release confinement facility design, a topic that remains largely unexplored within the field of architecture. It marks a pioneering effort to reframe the discourse on post-release reintegration—not only from legal or sociological perspectives, as is typically the case—but from a spatial and design-based standpoint. The article contributes to expanding the understanding of "design + justice" in the Thai context, and is grounded in real-world data and stakeholder engagement

Link: https://so04.tci-thaijo.org/index.php/JTJS/article/view/275734

[11] March 2025, Presentation of the Mother and Child Center Design Proposal

The research team was formally invited by the Director of the Central Women's Correctional Institution, Klong Prem, to present the prototype architectural design for a proposed Mother and Child Center. The presentation served as a foundational step for planning and allocating an official construction budget to realize the project.

Impact: This moment marked a pivotal shift—from academic concept to actionable policy. The research findings and design proposal became part of a governmental decision-making process at the executive level. The architectural model was no longer just a speculative design—it became a policy tool to shape future spatial infrastructure.

Should the center receive funding and be built, it would become a landmark case—a concrete example of how participatory, justice-oriented design can influence correctional reform. Moreover, it would serve as a replicable model that could be adapted and implemented in women's prisons across the country.

[10] December 2024, Award Recognition: Socially engaged academic service

The project's lead investigator received the ASAIHL Thailand Outstanding Achievement Award 2024 for excellence in academic service to society. This prestigious national recognition highlights the impact of the Mother and Child Center in Prison project, along with its related initiative on Post-Release Confinement Facilities.

Impact: The award reflects the project's significant social impact and its recognition by key policy-level institutions such as the Department of Corrections, the Thailand Institute of Justice (TIJ), and the Ministry of Justice, as a model that is feasible for real-world implementation.

Link: https://www.bu.ac.th/en/featured-stories/1674

[9] November 2024, Award Recognition: Academic excellence

Distinguished Academic Award in the Social Sciences (Honourable Mention), presented by the Association of Private Higher Education Institutions of Thailand under the Patronage of Her Royal Highness Princess Maha Chakri Sirindhorn.

Impact: This award reflects national-level academic recognition of the quality and social significance of the research. It highlights the continuity and integration of academic work—spanning teaching, research, and public engagement—and affirms the project's institutional value. The recognition also strengthens the potential for securing further research funding or institutional support in the future.

Link: https://www.bu.ac.th/en/featured-stories/1617

[8] July 2024, Research Presentation: Post-Release Confinement Facility Design

The research project on post-release confinement was presented as part of a review session under the National Research Program on Technological and Innovative Solutions for Crisis Management in Controlled Facilities. The presentation was part of Subproject 2: Design and Construction of Post-Release Confinement Facilities for individuals under surveillance in accordance with the Recidivism Prevention Act of 2022, which targets offenses related to sexual violence or physical aggression. The event took place at Centra by Centara Government Complex Hotel & Convention Centre, Chaeng Watthana, Bangkok.

Impact: This platform was designed to connect academic research with key government agencies responsible for correctional policy and national security. The project introduced a human-centered design alternative to conventional control-based measures. By proposing a spatial model grounded in care, dignity, and reintegration, the research offered a radically different approach that emphasizes rehabilitation over restriction.

Importantly, the project demonstrated high implementation readiness. The spatial prototype and conceptual model can be directly developed into official design guidelines or a prototype facility for the Department of Corrections, offering practical solutions that bridge policy, planning, and built environment innovation.

Link:

https://m.facebook.com/story.php?story_fbid=pfbid0AEDCZLQFiBsMknCoboNvrJALpgs1sxQE9pAgfovSv4JstC8krcZkH8qBY6HZ7ZfHI&id=100002657991916

[7] May 2024, Research Report Submission: Mother and Child Incarceration Research

Designing Confinement Facilities for Vulnerable Populations funded by the Internal Research Grant for Academic Unit Development, Fiscal Year 2023, School of Architecture Art and Design, King Mongkut's Institute of Technology Ladkrabang (KMITL)

Impact: This research deepened my understanding of the complex needs of incarcerated mothers and pregnant women—particularly regarding health, dignity, and humane living conditions. Beyond generating new academic knowledge, the project sparked a series of ongoing works, including scholarly publications, real-world teaching cases in architecture studios, public exhibitions, and artistic collaborations. All of these efforts are aligned toward a shared goal: using design to improve the quality of life for one of the most vulnerable groups within the justice system.

[6] March 2024, Research Report Submission: Post-Release Confinement Facility Design

Contracted Data Collection and Analysis for the project: "Development of Design and Construction Standards for Confinement Facilities in Thailand to Respond to Pandemic Crises" (Part of the national research initiative on Technological and Innovative Solutions for Crisis Management in Controlled Environments) funded by the Research and Development Institute for Justice Process (RIDJP). Impact: The Post-Release Confinement Facility Design contributed to a deeper understanding of Thailand's correctional context—particularly the spatial and regulatory constraints within the prison system. Though designed as a side project, running parallel to the primary research on incarcerated mothers and children, this study played a key role in expanding field engagement and data collection. It enabled direct access to diverse stakeholders, including inmates, correctional officers, prison directors, and justice scholars—both domestic and international.

Participation in this project not only enriched the design process with real-world insights, but also sharpened my understanding of correctional facilities as complex, dynamic environments. This perspective proved essential in refining a human-centered design approach tailored to the needs of vulnerable populations within the justice system.

[5] October 2023, Institutional Collaboration

The school of Architecture signed an Academic Memorandum of Understanding (MoU) with the Thailand Institute of Justice (TIJ)—a public organization—under the framework of the "Restart Academy" project, a vocational training and reintegration program for formerly incarcerated individuals.

Impact: This partnership lays the foundation for a long-term strategic collaboration with a national justice-sector organization, establishing a shared platform for future policy-oriented initiatives and multi-sectoral engagement.

Link: https://www.bu.ac.th/en/arch/featured-stories/1125

[4] July 2023, Opening of the "Opportunity Space" Museum at Phathammarong Prison, Chiang Mai

This museum presents the lived experiences of incarcerated women and highlights the opportunities for reintegration into society. It introduces design as a communicative tool for justice, offering a platform where architecture, design, and the justice system intersect.

Impact: The exhibition marks the beginning of a new dialogue—one where spatial design becomes a medium through which complex issues of incarceration, dignity, and social reintegration can be explored, expressed, and understood by the broader public.

Link: https://www.the101.world/tij-bu-arch/

[3] August 2019, Attened the TIJ Executive Program on the Rule of Law and Development (RoLD)

by Thailand Institute of Justice, March-August 2019

Impact: Participation in the RoLD (Rule of Law and Development) Program provided deeper insight into the structure and flow of Thailand's justice system—from families and police stations to courts, prosecutors, and correctional institutions. The program clarified that justice is shaped not only within courtrooms, but across an interconnected system. It also revealed how design can serve as a strategic tool throughout that system, not just as physical intervention. One key area of interest was the Bangkok Rules, which offer a human-centered framework for improving conditions for vulnerable groups in prisons—especially women—emphasizing dignity and care beyond the traditional lens of punishment.

Link: https://www.tijthailand.org/en/highlight/detail/tij-promotes-the-rule-of-law-for-development#:~:text=Jacobs.,public%20presentation%20at%20the%20forum

[2] January 2019, Attened workshop for Emerging Leaders on the Rule of Law & Policy

Organised by Thailand Institute of Justice (TIJ) and The Institute for Global Law and Policy at Harvard Law School, 6-11 January 2019

Impact: Participation in this workshop marked a critical starting point in deepening my understanding of the Rule of Law and the many dimensions of justice—legal, policy-related, and structural. It expanded my perspective, showing that justice is not solely the domain of legal systems, but also fundamentally connected to human rights, equity, and the design of spaces that are accessible to all.

This experience prompted a profound question: "How can architecture contribute to justice?" It became a turning point that led to the development of the academic concept of "Design + Justice," which would go on to shape future research, teaching, and design practice.

Link: https://tijforum.org/wp-content/uploads/2018/12/2019-TIJ-WRKSHP-Prgrm_print2.pdf

[1] August 2017, Undergraduate Thesis Supervision

Served as the academic advisor for a Bachelor's degree thesis in architecture titled "Isarasathan: A Place for Those Who Have Erred

Impact: This project marked the starting point of a deeper interest in the development of spatial environments for incarcerated individuals, particularly in exploring how design can support rehabilitation and reintegration within the prison context.