



From Social Taboo to Brace of Hope

Redefining Public Toilets to Reclaim Women's Right to the City



Case study of Tyre, Lebanon



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Abstract

Toilets, though indispensable in urban infrastructure and everyday life, often remain overlooked in city planning discourse and public consciousness. Throughout history, public toilets have taken many forms and served different societal, political and economical agendas, eventually evolving into the technologically advanced and architecturally diverse facilities we encounter today. Yet, a persistent gender disparity in their design and provision endures, primarily catering to male users. The restricted access to public toilets for women has profound implications disrupting the accessibility and participation of women within the city's social and economic realms. It further accentuates the challenges associated with the roles women have chosen or had imposed upon them. This thesis investigates the design deficiencies in public toilets, in the context of today's Lebanon, with a focus on their disproportionately adverse impacts on women and other marginalized groups. It underscores public toilets' significance as vital social spaces and examines their role in shaping women's visibility in the city. The fieldwork analysis and proposal target Tyre, a traditional coastal city in Southern Lebanon. The city's population is diverse, consisting of local Lebanese residents, as well as Palestinian and Syrian refugees who have either lived there for multiple generations or have arrived more recently. Gender roles tend to be well-defined, with women shouldering the primary responsibilities associated with child-rearing, household management, and the majority of domestic chores. This puts them in direct contact with the city's streets and public spaces. Those spaces, though often offering restrooms for men, uniformly lack facilities for women, making it considerably more challenging for them to carry out their responsibilities. While design alone cannot directly recalibrate established gender roles, it can certainly play a pivotal role in facilitating and supporting women in their endeavors. To this end, the proposal introduces multifunctional public toilet "houses" positioned in strategic locations around the city, and conceived with women's bodily needs and different societal roles in mind. Additionally, multiple single unisex toilets are positioned in less congested locations to compensate for the lack of facilities hindering women's access to the city and provide safe and well-equipped spaces for when nature calls. The end goal of these facilities is to reclaim the access and right of women in Tyre to public spaces and facilitate their daily intricate chores.

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Part I

Women in Public Spaces

1.1 Gender and public spaces

1.1.1_Personal experience from east to west

At the tender age of 17, I embarked on a solo journey through the bustling streets of Hamra in Beirut, searching for housing as I prepared to leave my parents' home in Tyre for the exciting chapter of university life. That first night in my dorm room, perched on the first floor, was a sensory revelation. I gazed out of the window, captivated by the symphony of life below—people strolling, engaged in animated conversations, vibrant city lights casting an enchanting glow, and the rhythmic hum of traffic.

This nocturnal exploration marked a departure from my past experiences. Back in Tyre, the night was a forbidden realm for many women, akin to daylight for a vampire. Darkened streets, unsettling comments, and chilling tales loomed in my mind, instilling unwarranted fear every time I walked out alone. However, that night in Hamra was different—I went out for a walk. Subsequent evenings mirrored the same reassuring calm. Slowly, I relaxed, discovering a newfound sense of belonging on the busy streets. I relished the freedom to go out for the sake of fresh air, not just to attend evening classes or make essential purchases. Yet, the habits of caution persisted. I clutched my keys, avoided certain alleys, stole glances behind me, and occasionally asked male friends to walk with me.

Fast forward three years, and another adventure awaited me in Turin as I pursued another degree. The prospect of a young woman navigating an unfamiliar country without the watchful eyes of close-knit relatives and the cultural weight of Lebanon's expectations was met with disdain from family members. Even I, despite my resolve, grappled with fears about navigating a city vastly different from what I knew. The challenges included grappling with Google Maps in 2017 to decipher bus routes and schedules, a daunting task for someone unaccustomed to relying on public transportation, an unfamiliar concept in Lebanon. The simple act of jogging in the park, even during daylight hours, was a new experience for me. Over time, I acclimated to the myriad changes—daily runs became a ritual, and walking alone became a true pleasure, with evenings holding a special allure. Despite maintaining precautions, such as avoiding dark bus stops and park walks, and enduring unwarranted gazes and

comments, I felt less anxious. However, the feeling of being watched persisted, prompting me to carry a jacket at all times when alone.

It wasn't until I relocated to Gothenburg for exchange followed by Copenhagen for work that my nervous system finally calmed down. The latter city's luminous streets, efficient public transportation, and well-defined paths were a stark contrast to my previous experiences. In Copenhagen, men confidently cared for their babies, and accessibility was seamlessly woven into the urban fabric. The city's openness and constant activities gave it a sense of constant security. It felt like a city designed for the harmony of family life. Little kids confidently navigated their way to school without the constant shadow of their parents. Public transport boasted designated spaces for moms and their kids, making the commute a seamless and comfortable experience. Every corner seemed to have a free playground, turning the city into one big, communal playground for families and individuals.

It was in the midst of this vibrant city that I encountered a seemingly mundane yet telling episode—one that unveiled the subtle differences in the experience of public spaces as a woman. It was the abundance and upkeep of public toilets. In Lebanon, they were an afterthought; in Turin, I avoided them for hygiene concerns. In Copenhagen, they were everywhere and well-maintained, serving as more than just conveniences for traditional needs. From the subtle cues in restroom design to the unspoken norms governing social interactions, public toilets revealed to me a tapestry of cultural attitude towards women's bodies and their occupation of public spaces.

Now toilets feel like spaces of refuge to me—a place of solitude during moments of stress at work, a place to change before a journey, or a spot for parents attending to their children's needs. The public's trust in these facilities showcased their multifaceted importance, from cleaning spilled coffee off clothes to facilitating a quick shower for cyclists commuting to work. It dawned on me that toilets were not just about bodily functions but were vital public spaces, offering support for various roles one might undertake in a day. Their significance extends beyond the conventional, playing a crucial role in the daily lives of individuals and, especially, women, intimately linked to the body and its diverse needs.



Shared toilet in Copenhagen metro station for a diverse number of users, attendants present.



Self standing toilet in Copenhagen city centre, a queue of women is observed at the stalls.

1.1.2_How do public spaces fail women?

For decades, urban planning had primarily been driven by utilitarian and often gender-blind considerations, resulting in cities that fell short in addressing the unique needs and experiences of women. In her book *The Feminist City*, Leslie Kern stated that the city presents hidden barriers—physical, social, economic, and symbolic—for women, influencing their daily lives in predominantly gendered ways. These obstacles often go unnoticed by men due to their different experiences. Consequently, male-dominated decision-makers in cities, overseeing areas such as economic policy, housing design, school placement, and policing, lack awareness and concern for the impact on women. The urban environment prioritizes traditional male gender roles, treating men's experiences as the norm while disregarding the roadblocks it poses for women in their daily city life (2020).

Fear

Cities play a significant role in perpetuating gender inequalities, enforcing societal norms that limit women's freedom. Rape myths, embedded in the geography of urban spaces, subject women to blame and scrutiny based on their location, choices, and actions (Kern, 2020). These myths, intertwined with actual threats, contribute to shaping women's mental maps, constraining their mobility and reinforcing the idea that the city is not truly meant for them (Valentine, 1989). The concept of a city, encompassing both its tangible elements and its perceived dangers, thrills, culture, and allure, resides not only in its physical form but equally in the collective imagination influenced by experiences, media, art, rumors, and individual desires and fears. It is essentially a combination of past experience and secondary information.

The association between male violence and specific environmental contexts significantly influences women's spatial choices, giving rise to "coping strategies" aimed at ensuring safety (Riger and Gordon, 1981). Women's perceptions and experiences of the environment differ from those of men due to fear, with specific places being identified as

frightening during the day, and a general fear of all public spaces when alone at night (Mazey and Lee, 1983; Tuan, 1974, as cited in Valentine, 1989). Nighttime poses increased risks, reducing visibility and creating an environment dominated by men, who are perceived as a source of potential danger through both their numbers and assertive behavior. This fear isn't confined to physical spaces alone; it is intricately linked to the usage, occupation, and control of public spaces by different groups at different times, creating a vicious circle that undermines women's confidence to live independently, pursue certain occupations, and socialize without a group or male chaperon (Valentine, 1989, p. 389). The restricted use of public space reinforces women's confinement to the home, perpetuating a cycle of fear and male dominance—a spatial expression of patriarchy.

Gendered spaces

Gender norms permeate the very fabric of spaces designated for work and home, blurring the boundaries between public and private realms. The pervasive underrepresentation of women in architectural and planning professions exacerbates the issue, leading to the oversight or framing of women's experiences through outdated stereotypes. Effectively addressing the challenges women face in urban environments necessitates a profound acknowledgment that urban design alone cannot dismantle the patriarchal underpinnings shaping these experiences. Furthermore, assuming a monolithic female experience ignores the diverse intersections of social differences among women and the intricate interplay of multiple systems of privilege and oppression (Kern, 2020). This foundational principle shows that the city, in both its design and functionality, is inherently structured to pose challenges to the lives of women.

Paid vs unpaid work

Cities, much like suburbs, are constructed based on presumed social norms and institutions. Geographer Kim England (1991) emphasized that the arrangement of residential areas, workplaces, transportation networks, and the overall urban layout mirrors the expectations of a patriarchal capitalist society, dictating where, when, and by whom specific activities should occur. Despite the advantages cities may offer



A mother with her baby begging in Athens. Photo: Milos Bicanski/Getty

in comparison to suburbs, they are not designed with the intention of facilitating women's management of the "double shifts" involving both paid and unpaid work. Research indicates that women's commutes are frequently more intricate, reflecting the sometimes conflicting demands of their combined paid and unpaid responsibilities (Kern, 2020).

The idea of considering gender in urban planning, known as gender mainstreaming, is gradually becoming more common in cities. In places like Stockholm, they've implemented a "gender equal plowing strategy" where the focus is on clearing sidewalks, bike paths, bus lanes, and areas around daycares first (Kern, 2020). This approach recognizes that women, children, and seniors are more likely to walk, bike, or use public transportation, ensuring that their needs are given priority in city planning. Improving access to city services and amenities benefits everyone. Things like accessible transportation, well-maintained sidewalks, affordable housing, clean public bathrooms, community gardens, fair wages, and shared spaces for activities like meal preparation can ease challenges for various households and contribute to broader goals like environmental sustainability.

1.2 The Feminist City: Making the Specific the General

1.2.1 Emergence of feminist urbanism and theory

In the midst of urbanization and the ever-evolving landscape of our cities, the concept of the “Feminist City” has emerged as a beacon of hope and transformation. It is a concept that goes beyond the physical layout of our urban environments, transcending mere infrastructure and architectural design. Instead, it represents a visionary yet ambitious aspiration to reconfigure urban spaces, their design, accessibility, and safety that play a critical role in fostering gender equality and empowering women.

For decades, urban planning has primarily been driven by utilitarian and often gender-blind considerations. The Modulor, developed by Le Corbusier in 1948, embodies a physically healthy, Caucasian male idealized through mathematical proportions rooted in “natural” concepts like the golden ratio and Fibonacci series. He described the Modulor as “a harmonious measure to the human scale, universally applicable to Architecture and Mechanics” (Le Corbusier, 1961, p.3). It was an attempt to standardize and provide a universal basis for design that considered the ‘normative and normalized’ body as its central reference point, aiming to provide universal applicability to a wide range of design projects. The Modulor exemplifies how design standards for both spaces and objects were often based on male-centric measurements and ideas, excluding the needs and experiences of women, marginalized groups, and individuals engaged in a variety of daily activities, including ones associated with unpaid labor.

The traditional cityscape, while functional in many respects, has too often fallen short in addressing the unique needs and experiences of women (Kern, 2020). This oversight has manifested in numerous ways, from inadequate safety measures in public spaces to a lack of accessible childcare facilities; and from a dearth of women in leadership roles within urban governance to the subtle yet pervasive underrepresentation of women in the very fabric of our cities.

The emergence of feminist urbanism in the late 20th century challenged this status quo by foregrounding gender as a critical dimension of urban planning and development. It demanded a fundamental shift in perspective—one that recognizes that cities are not gender-neutral entities (Visakha, 2023). Instead, they are woven into the complex tapestry of social, cultural, and economic life, with gender dynamics deeply embedded within their foundations. Several authors and activists played pivotal roles in the development of feminist urbanism.

Dolores Hayden, a feminist scholar, was one of the early advocates who explored the relationship between women’s roles in the household and urban planning in her book ‘The Grand Domestic Revolution,’ followed by many other publications. Marion Mahony Griffin, the first licensed female architect in Illinois in 1989 (Gray, 2022), was an early advocate for urban design that considered the needs of women and children, emphasizing green spaces and child-friendly urban planning. Today, many scholars and researchers, including Leslie Kern, Beatriz Colomina, Clara Greed, and others, are making significant contributions by delving into the intersection of architecture and spatial planning with various facets of women’s lives, such as gender, health, race, labor, equality, and justice.

Feminist urbanism addresses a wide range of interconnected issues within urban settings, all with the common goal of promoting the well-being and empowerment of women and marginalized communities. At its core, it strives to create cities that take into account the needs of daily life, and respond to the diverse needs of all residents (Col-lectiuPunt 6, 2023).

The movement prioritizes several key aspects in its pursuit of more inclusive cities. It places great importance on the safety of women in public spaces, acknowledging the specific concerns they face, particularly during nighttime. Affordable housing is another critical issue, impacting many women, especially those in low-income households (World Bank, 2015). Moreover, the provision of accessible and high-quality childcare facilities is essential for women’s active participation in the workforce, and feminist urbanism advocates for policies that enhance childcare accessibility and affordability, enabling women to balance



A woman pushing a child in a stroller in a cross walk, New York City. Dan Mitchell, 2017.

their professional and family responsibilities effectively (CUPE, 2022). Additionally, it emphasizes the need for gender-responsive transportation systems that address women's safety, accessibility, and convenience. Education quality and school locations are also significant considerations, as they profoundly affect families, particularly women. Finally, inclusive public spaces that welcome and accommodate residents of all genders, abilities, and backgrounds are at the heart of feminist urbanism, fostering a strong sense of community and belonging. Discussing the importance of women-centered urbanism is essential, given the multiple dimensions in which women are interconnected with urban social issues. Leslie Kern (2020), the author of the book *Feminist City*, underscores that women's urban experiences are often characterized by various barriers, encompassing physical, social, economic, and symbolic aspects, and these barriers significantly influence their daily lives, albeit not exclusively. A lot of these challenges aren't as visible or noticeable to men because they don't experience them in the same way. Consequently, a critical concern arises when the predominant decision-makers in cities, who are predominantly men, make all choices regarding urban policies, housing design, school allocations, public transportation arrangements, law enforcement strategies, and even snow removal without adequate awareness or consideration of how these decisions impact women.

"IT SEEMS THAT NOT ONLY HAVE WE FAILED TO WIN THE UNIVERSAL RIGHT TO TAKE PART IN THE DESIGN AND THE CONSTRUCTION OF CITIES, WE'VE EVEN FAILED TO WIN THE RIGHT TO USE THEM, TO SIMPLY INHABIT THEM"

(SUBIRATS, 2018)

Borrowing a thought from Marina Subirats (2018), a distinguished sociologist specializing in the sociology of education and women, who pondered in her article whether there truly exists a "woman's city". Subirats expanded by saying that as women, they often find themselves lacking ownership of space, whether it's private or public. Society ingrains in women the notion that these spaces do not belong to them, and this is worsened by their limited participation in planning processes. In other words, women often feel that they lack equal spatial authority

or influence compared to men. Issues, ranging from inclusion in decision making, to safety concerns and inadequate design, lead to a city that primarily caters to a male-centric lifestyle. This makes it more challenging for women to navigate their roles, whether by choice or necessity, and the city itself becomes an additional burden. These challenges stem from deeply entrenched gender biases in urban design and planning, reinforcing inequalities and the marginalization of women not only in public spaces but also within their own homes. And although women are steadily making strides toward asserting their rights in the city, particularly concerning using public spaces, they are still marginalized and underrepresented in the active participation of making spaces.

1.2.2 Vienna as a Prototype: example of a feminist city and features

Vienna, Austria, emerges as a pioneering city in the global pursuit of feminist urbanism. Its transformation into a Feminist City exemplifies a paradigm shift in urban planning and policy-making. This shift is characterized by a resolute commitment to dismantling the systemic gender inequalities that persist within urban environments. Vienna's first women's office has made substantial progress since 1991 in reimagining the city's urban landscape, aligning urban development with feminist principles, and nurturing an environment where gender equality is not a distant goal but an everyday reality.

The city's journey towards gender-inclusive urban planning has been marked by significant milestones and policy changes over the years. With a population of approximately 2 million residents, the city, like many others historically, was primarily shaped by male designers and planners. The enduring consequences of this historical perspective continue to influence urban life even in the 21st century (Ross, 2023). However, starting in the 1990s, a notable shift began to occur, as there was a growing recognition of the need to address women's daily activities and requirements more openly, leading to increased public discourse on the matter. The concept of "gender mainstreaming," which aims to ensure equal consideration of women and men in policy, legislation, and resource allocation, was proposed in 1985 at the Nairobi World Conference on Women, and later embraced by the UN in 1995 (UN

Women, 2023). However, Vienna had already adopted this progressive approach to urban planning before it gained global recognition. One of the fundamental steps in this transformation was the collection of gender-sensitive data. In 1991, Vienna initiated an analysis of the "modal split," assessing the percentage of male and female residents using different modes of transport. The results highlighted striking disparities in transport patterns: men were more likely to use cars and bikes, while women predominantly relied on walking and public transport (Kail, 2017).

To further illuminate the gendered aspects of urban living, Eva Kail, a renowned expert in gender mainstreaming and then junior district planner, organized the photography exhibition 'Who Owns Public Space - Women's Everyday Life in the City' in the same year. The exhibition documented the daily lives of eight diverse women and girls in the city featured in 8 panels, shedding light on aspects that had been overlooked by male planners - like distinct urban experiences. Panel 2 opened by highlighting that around 836,000 women comprising 54% of the population lived in the city. This emphasized the profound impact of gender inequality on urban planning and, consequently, the well-being of women in the city. The exhibition employed images, narratives, and quotations, to depict the challenges faced by women in the urban environment. It also presented meticulously collected and organized data (Ferradás & Jackowska, 2022). Although resistance to gender mainstreaming was initially significant, the exhibition played a pivotal role in changing mindsets within the urban planning community (Kail, 2017).

Vienna established its first women's office in 1992, known as the "Frauenbüro" and led by Kail. Under her leadership, the office initiated a remarkable transformation, launching more than 60 projects throughout the entire city (Hunt, 2019). Vienna's urban planning landscape underwent significant changes in the early 1990s as the city experienced rapid expansion, with a target of building 10,000 new apartments annually. Many architecture firms received contracts, yet the absence of any women architects being invited to present their designs exposed a clear gender bias within the industry. In response, Kail initiated a transformative approach by inviting only women architects, who represented just 6% of



Exhibition photo with many women crossing the road in Vienna in 1991. Photograph by Barbara Krobath.



A man looking at the exhibition panels in 1991. Source: Robert Hutterer, Municipal Archive of Vienna.

the profession at the time, to submit proposals for a pioneering social housing project north of the city (Kail, 2019). The competition process was comprehensive, considering various aspects such as urbanism, open spaces, walkways, and flat layouts. It also incorporated a fictitious everyday routine scenario and assessed 14 exemplary gender-sensitive planning projects (Palit, 2019).

The resulting Frauen-Werk-Stadt, completed in 1997 with 375 homes, embodied a woman's perspective at every level of its design, from pram storage and wide stairwells to flexible flat layouts and high-quality secondary rooms (Riss, 2019). The central pedestrian spaces, car-free zones, and shared-surface roads within the development were ahead of their time in emphasizing pedestrian safety and accessibility. The housing design incorporated a variety of flat types, internal layouts, and balcony designs to accommodate evolving family needs. A notable design choice was placing the communal laundry facility on the top floor adjacent to a shared roof terrace, optimizing natural light (Lee, 2023).



Flexible apartment layouts accommodate different life stages in Frauen-Werk-Stadt (Hunt, 2019)

Vienna's commitment to gender mainstreaming gained momentum with a large-scale survey conducted by the City Women's Office in 1999. This survey explored the city's residents' daily routines and revealed that women had more varied routines, including trips to schools, doctors, shops, and visits to family members (Kail, 2017). This crucial data prompted Vienna to rethink its long-term approach to urban planning, emphasizing accessibility, safety, and ease of movement. By 2002, Vienna had designated Mariahilf, a densely populated neighborhood with about 28,000 residents, as a pilot district for gender mainstreaming.

The Mariahilfer Strasse, previously a heavy car traffic street, was transformed into a 1.6-kilometer-long pedestrian zone, along with two shared space zones. This project was the result of extensive citizen engagement, stakeholder consultations, and a subsequent referendum. The redesigned boulevard now serves as a vibrant hub for leisurely strolls, shopping, relaxation, and even recreation in the heart of the city. It plays a vital role in fostering community bonds between the densely populated neighboring boroughs, which have limited green spaces and playgrounds.

The shared space zones accommodate low-speed traffic, including public and private vehicles, while the central pedestrian zone has provided much-needed additional open space for families and a vast number of shoppers. This transformation has triggered a commercial boom, benefiting businesses not only on Mariahilfer Strasse but also in the adjacent streets (Vienna Solutions). Improvements involved upgrading street lighting, adjusting traffic lights to prioritize pedestrian safety, and introducing seating in nine additional locations. Over a kilometer of pavement was widened to enhance accessibility, and five areas were transformed to be entirely barrier-free, ensuring ease of movement for individuals with prams, wheelchairs, and the elderly (Kail, 2019).

Wolfgang Gerlich, a consultant at PlanSinn which advised on the Aspern project in Vienna 'The City with a Female Face', noted that despite some opposition from specific segments of the Viennese population, the gender mainstreaming plan consistently received support from top authorities (2019). Statements, symbols, and initiatives were implemented



Exhibition photo with many women crossing the road in Vienna in 1991. Photograph by Barbara Krobath.



A man looking at the exhibition panels in 1991. Source: Robert Hutterer, Municipal Archive of Vienna.

to underscore this commitment. Gender-sensitive language and titles were introduced into corporate branding, and awareness-raising posters within the underground train network depicted men and women equally.

This unwavering support led to the enshrinement of gender mainstreaming principles within city policy, complete with sanctions for non-compliance (Kail 2019). “Gender budgeting,” introduced in 2005, compelled each department to report on the equitable benefits of their expenditures for both men and women. Furthermore, new housing projects were also required to meet gender sensitivity criteria to be eligible for subsidies, establishing a checklist to ensure that gender mainstreaming was not dependent on individual interest (Kail, 2017). Another successful initiative of gender mainstreaming by Kail was focused on addressing unequal access to city parks, particularly for young girls. By introducing accessibility features, volleyball and badminton courts, and improved lighting, Vienna transformed the parks, making them more inviting for girls and women (Kail, 2017).

Vienna’s pioneering efforts in gender-inclusive urban planning culminated in global recognition by the UN Human Settlements program in 2008, which acknowledged the city’s urban planning strategy as best practice (UN). This recognition has positioned Vienna as a model for other cities like Berlin, Barcelona, and Copenhagen, which have started incorporating gender mainstreaming into their urban design (Gerlich, 2019).

Today, the “Aspern” neighborhood in Vienna, spanning 240 hectares and intended to house 20,000 residents and workplaces, stands as one of Europe’s largest urban developments with project completion anticipated in 2028. Designed with a multi-generational approach, it centers around an artificial lake and dedicates half of its space to public areas, earning the title “Vienna’s Urban Lakeside.” A noteworthy departure from tradition is the naming of all streets and public spaces after women: Hannah Arendt Platz, Janis Joplin Promenade, Ada Lovelace Strasse, Madame d’Ora Park and more, chosen by 30 experts (Hunt, 2019). “Aspern has a female face”, that signifies a policy shift to celebrate female achievements and challenge Vienna’s predominantly male-named streets.

Over almost three decades, gender mainstreaming has become an integral part of Vienna’s municipality, emphasizing its role in creating well-designed neighborhoods and fostering a sense of community.

Leading orchestras, museums, opera houses, and exhibition venues, women are injecting new life into Vienna’s cultural landscape. An increasing number of the city’s cultural institutions are now under female leadership, and this trend continues to grow (WIEN, 2023). Vienna’s policies and urban planning choices have brought about direct impacts on both women’s and men’s lives. The city’s commitment to enhancing safety through well-lit streets and pedestrian-friendly infrastructure has notably reduced the risk of harassment or violence for women, especially during nighttime (Kail, 2019). Improved accessibility, including widened pavements and pedestrian-friendly traffic lights, has eased women’s mobility, enabling easier access to essential services like schools and healthcare (Illien, 2021). Gender-inclusive parks and women-centric housing complexes offer women safer and more comfortable outdoor spaces and living environments.



Aspern. Photograph: Daniel Hawelka for Seestadt

Furthermore, Vienna's efforts to recognize and represent women through the naming of 54% of streets and public spaces promote gender equality (Poole, 2021). Involving citizens in planning decisions fosters community engagement and empowerment among women, while urban transformations create job opportunities, directly benefiting women's employment prospects. These direct impacts reflect Vienna's commitment to addressing women's unique needs, ensuring their safety, and promoting their empowerment within the city.

Vienna's remarkable journey towards becoming a Feminist City is a testament to the power of progressive urban strategies and inclusive planning, and a powerful model for urban planners and policymakers globally. The city's commitment to prioritizing safety, accessibility, and the specific needs of women within its urban landscape has not only transformed physical spaces but also contributed to a more inclusive and equitable society. This dedication is evident in pioneering projects like Aspern and Mariahilfer Strasse, which have propelled Vienna to its well-deserved status as the world's most livable city.

Moreover, the increasing presence of women in leadership roles within Vienna's cultural institutions highlights the city's commitment to gender equality across various domains. However, it is essential to recognize that Vienna, like any city, faces challenges in maintaining and furthering these achievements. These challenges may include the need to balance competing urban priorities, such as climate resilience and migration, while ensuring that gender mainstreaming remains a central focus.

"IF IT* DIDN'T HAPPEN, WE WOULD FEEL IT. BUT AS LONG AS IT HAPPENS, WE DON'T SEE IT.

IF THEY'VE REALLY ACCEPTED IT, IT BECOMES INVISIBLE."

(KAIL, 2019)

*Gender mainstreaming



Frauentag Wien Vienna, 19th March 2011. Paco Bernal.

1.3 Toilets as Social and Political Public Spaces

1.3.1. Social and body perspectives

In discussions about urban public spaces, bathrooms often don't immediately come to mind, which is a fundamental part of the issue. The availability—or lack—of public bathrooms raises important concerns about safety, accessibility, gender, sexuality, and class.

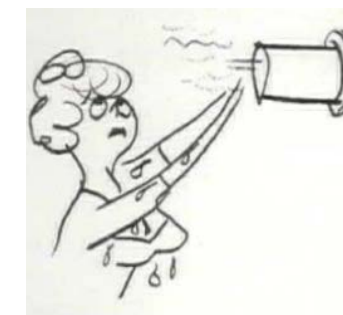
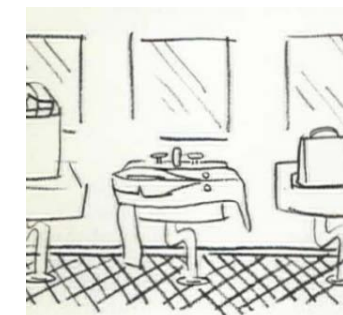
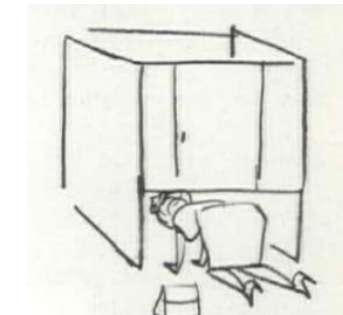
The term 'toilets' encompasses a vast array of interconnected issues, ranging from crime and vandalism to various aspects of sexuality, environmental concerns like water conservation and global sustainability, matters related to health, hygiene, and medicine, and women's issues, to name a few. It extends to childcare, breastfeeding, and sanitary product disposal, considerations related to public transportation and private travel, leisure, tourism, and sports, as well as topics related to continence, disability, and aging. Architectural, engineering, and design considerations, sewerage, drainage, and plumbing systems, along with the influence of religion, culture, and taboos on toilet usage and design, are all integral components of this multifaceted subject. Recognizing toilets as a pivotal element in spatial planning is essential, emphasizing their significance beyond a peripheral aspect of the cityscape.

Clara Greed argues in her book *Inclusive Urban Design: Public toilets* (2007) that Bathroom needs and access are deeply influenced by gender, involving a mix of biological and cultural factors. For women, the process is often more time-consuming, addressing menstrual needs and requiring adjustments to clothing. Women typically need more amenities like toilet paper, places to hang belongings, private stalls, and may also be responsible for assisting others, such as babies, children, the disabled, or elderly family members. Most public bathrooms fall short in recognizing and catering to these specific needs. This issue arises from a lack of consideration by predominantly male architects and planners who have not thoroughly examined what women truly require in a restroom. Moreover, societal taboos around discussing bathroom-related matters,

especially menstruation, contribute to the oversight. Menstruation, in particular, remains largely unknown to the mostly cisgender men designing public bathrooms. There is a reluctance to acknowledge that menstruation affects the duration of bathroom use, leads to more frequent urination, involves cramping that may result in urgent bowel movements, and includes immediate concerns like "flooding".

Despite numerous existing toilet manuals offering guidelines for internal layouts, plumbing fixtures, and fittings, Greed argues that they often lack integration with broader urban design and policy considerations. These guidelines focus primarily on individual restroom specifications, overlooking the external environmental context and evolving user needs (2007). The issue is exacerbated by the fact that decisions regarding public toilets, which are more frequently needed by women due to biological differences, are often made by males who may not recognize or prioritize these concerns (Shaw, 2001). The inadequacies in the current situation extend beyond facility shortages to encompass poor quality, inadequate design, bad maintenance, and issues such as unsanitary conditions, antisocial behavior, and struggles against crime and vandalism. Additionally, factors like limited operating hours, unequal distribution, and improper placement create the perception of a lack of accessible public toilets (Kira, 1976; Asano, 2002).

The need for public toilets is linked to urban planning, transportation, and city design. The Industrial Revolution and advancements in transportation increased travel distances, separating homes from workplaces. This led to a demand for public restrooms as people spent longer hours away from home. Additionally, as more women joined the workforce and commuted, the need for women's public toilets grew. However, societal norms became more conservative, making it controversial to provide public restrooms for women, as noted by Robinson (2001).



A woman's struggles in the powder room. From the journal article Planning the Powder Room by Scott Brown. Sketches by Thomas Hutchens. 1967.

Inclusive toilet facilities at St David's Shopping center in Wales. From St David Shopping Center's guide for autistic guests.

1.3.2. Designing public toilets for women

In the context of designing spaces for women, it's important to adopt a dual perspective. At the macro level, the broad principle should be one of equality and inclusion, ensuring that women have the same access and opportunities as everyone else, without gender-based discrimination. However, on a micro level, designers should consider gender-sensitive features to address specific needs or concerns that women may have in certain spaces. Clara Greed (2007) describes her approach as "macroist," emphasizing inclusivity and universality. She believes that all facilities should be accessible to everyone, including women, but recognizes that there are instances where additional "special" provisions are necessary. These could include accommodations for users of wider powered wheelchairs or for adults facing advanced incontinence and mobility issues, highlighting the importance of tailoring accessibility measures to specific needs while maintaining a broad commitment to inclusivity.

For many women, going to work involves multiple stops, like dropping kids at school or running errands. Without a car, this can mean waiting at bus stops in the cold. A better city design, according to many women, would have shorter distances between work, home, and essential facilities like shops and schools, making daily life more convenient. Therefore, women and the individuals they are responsible for often need a different toilet setup, which may include a higher number of toilets located in various places (Greed, 1999a; WGSG, 1997a, b; Booth et al., 1996; Little, 1994; Darke et al., 2000, as cited in Greed, 2007). Toilet design has historically centered around male needs and then adapted to accommodate females. Yet, considering the biological and social differences in how women use toilets, there's a need for an entirely new approach to design. Women, disabled individuals, the elderly, and ethnic minorities often overlap in their identities. In certain situations, the most common citizen might be an older woman, rather than the young male worker who is typically portrayed as the universal standard.

Mixing restrooms without giving priority to women's needs doesn't work either. A study on toilet queues suggested unisex toilets might help reduce women's waiting times (Matthews, 2000, as cited in Greed, 2007). However, this study overlooked the fact that women already had fewer facilities, so everyone would wait longer unless both women and men had equal access. It also didn't consider the needs of children and the elderly, who might take more time. In general, unisex toilets often lead to fewer available facilities.

Cultural factors must be taken into consideration during the design process too. In Islamic culture, there is a preference against unisex toilets and mixed washbasin facilities, and this modern trend raises concerns for many Muslim women (Hamzah and Hooi, 2001, as cited in Greed, 2007). Additionally, the practice of using water for personal hygiene is preferred over toilet paper. Ritual washing is part of the preparation for daily prayers, and cleansing with water is deemed necessary after the passage of 'impurities'. This cleansing practice involves using water to purify both passages. To accommodate these practices, many toilets in places like Singapore are equipped with a water hose and nozzle for personal cleansing (Greed, 2007). Essentially, women have a diverse range of restroom needs and visits that require accessible, well-equipped public toilets with a welcoming atmosphere. This stands in contrast to the primary focus in men's restrooms, which is security against issues like drug use, vandalism, cottaging, and criminal activity (Greed, 2007).

Referring to Greed's guide for inclusive design and the recommendations by Women's Design Service, key 'hot spots' for toilet provision must be identified, considering areas with significant pedestrian traffic, bus stops, and places where people wait for shops to open. A comprehensive urban design strategy, tailored to user needs, is crucial for an integrated approach. To address diverse needs, including those of disabled individuals, baby-changing, and adult-changing facilities, they should be strategically placed between the Ladies and Gents toilets.

Additionally, Greed's policy for toilet cubicles recommends a minimum size of 900 mm by 1700 mm, with an ideal maximum of 1110 mm by 2050 mm. This range ensures ample space for everyone, promoting inclusivity in restroom design.



Part II

Public Toilets in Tyre, Lebanon

Status of Public toilets in Tyre

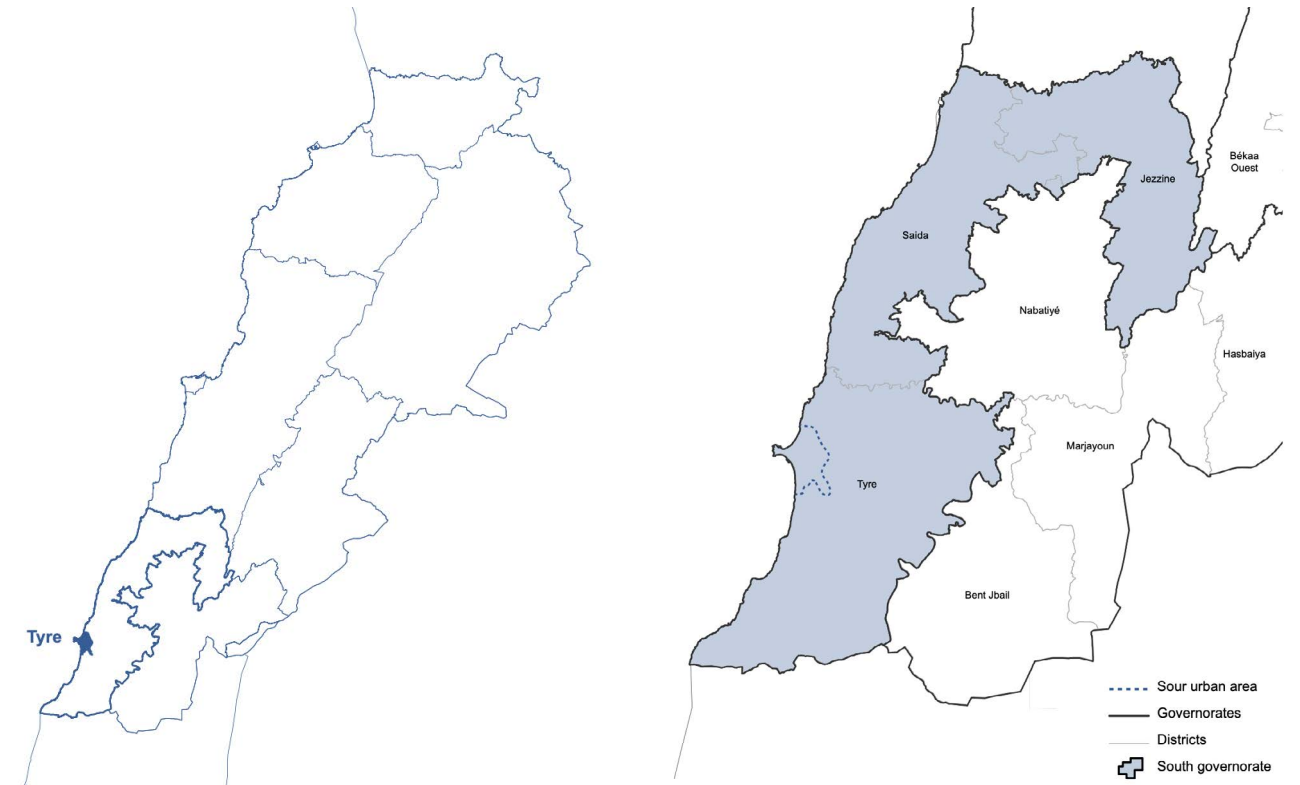
2.1_Attitudes towards public spaces

In contemporary Lebanese society, women have gained recognition and significance through their multifaceted roles as mothers, caregivers, and contributors to their families' finances. This shift has led to changes in their daily routines, expanding the number of places they need to visit, including schools, grocery stores, and workplaces. As a result, their time spent outside the home and in public spaces has increased. Given Lebanon's gender-oriented culture, where women often bear the responsibility of managing households and family care, it's crucial to emphasize the importance of supporting their role (Ahmadiéh and Mohsen, 2019). However Lebanese cities like Tyre have not physically adapted to the societal changes affecting women's every day chores.

A masculine culture permeates Lebanese society, impacting women's relationship with space. The primary issue lies in women's exclusion from the production process. While female emancipation was on the rise before the civil war, women's participation in the production process has become more explicit today, yet the outcomes remain limited. The future development of this process is challenging to predict (Melki, 2019).

Lebanese law previously restricted women from running for municipal councils in their original hometown if they married someone from outside that town. However, this law is evolving, and women will soon be allowed to run for their hometown's council even if they marry an outsider. (Melki, 2019). This change encourages women, especially young and empowered individuals, to participate in local governance at any point in their lives. Previously, many women were discouraged or prohibited from running for councils because they would have to step down in the middle of a 6-year mandate if they got married.

The labor force participation rate among females in Lebanon is notably lower than that of males, standing at 28.7% for women and 67% for men in 2022. Despite women constituting over half of the working-age population, their active engagement in the labor market is less than 30%, reflecting a likelihood of economic dependence (UNDP, 2021).



Location of Tyre in Lebanon, showing governorate boundaries. Source UN-Habitat, 2016.

Governorate and districts in relation to Tyre urban area. Source UN-Habitat, 2017.

Balancing work and family life is particularly challenging for employed women, limiting their employment opportunities, especially when raising children. Prevailing gender norms contribute to men being viewed as the primary income earners.

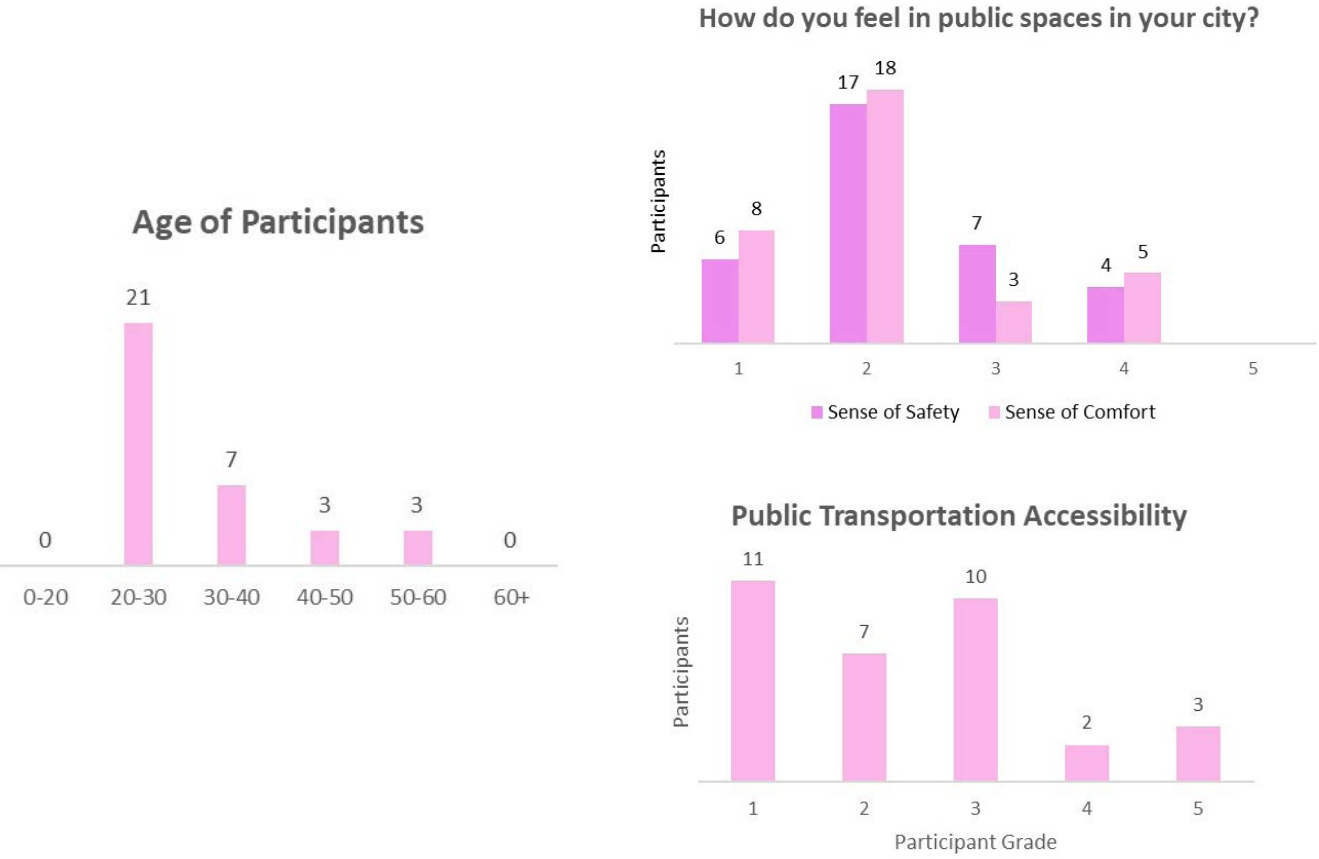
As for the presence of women in public spaces, the instances vary. In a survey studying gender inequalities in Beirut's public spaces, the results show that while inner residential streets with a strong sense of family community tend to have a higher female presence, factors such as unregulated parking, poor lighting, neglected land use, and the presence of stray animals contribute to the absence of women in some areas. Traditional gender roles also lead to the segregation of certain areas, such as factories and warehouses, impacting the pedestrian count (Dabaj and Nassour, 2022).

Bridges, often necessary for movement, pose challenges for women due to narrow, concealed, and unlit spaces, as well as the presence of visual and physical obstructions. Instances of harassment and robbery are common in these areas, with women choosing different transportation

modes based on their perception of security. Safety is a critical factor influencing women’s choice of transportation, leading many to prefer cars, especially at night, for a sense of security (Dabaj and Nassour, 2022).

Street-level harassment is another pervasive issue, with approximately 25% of women experiencing various forms, including verbal harassment, sexual harassment, and sexual assault (Melki, 2019). This gender disparity in harassment incidents underscores the need for addressing safety concerns to enhance women’s comfort and accessibility in public spaces.

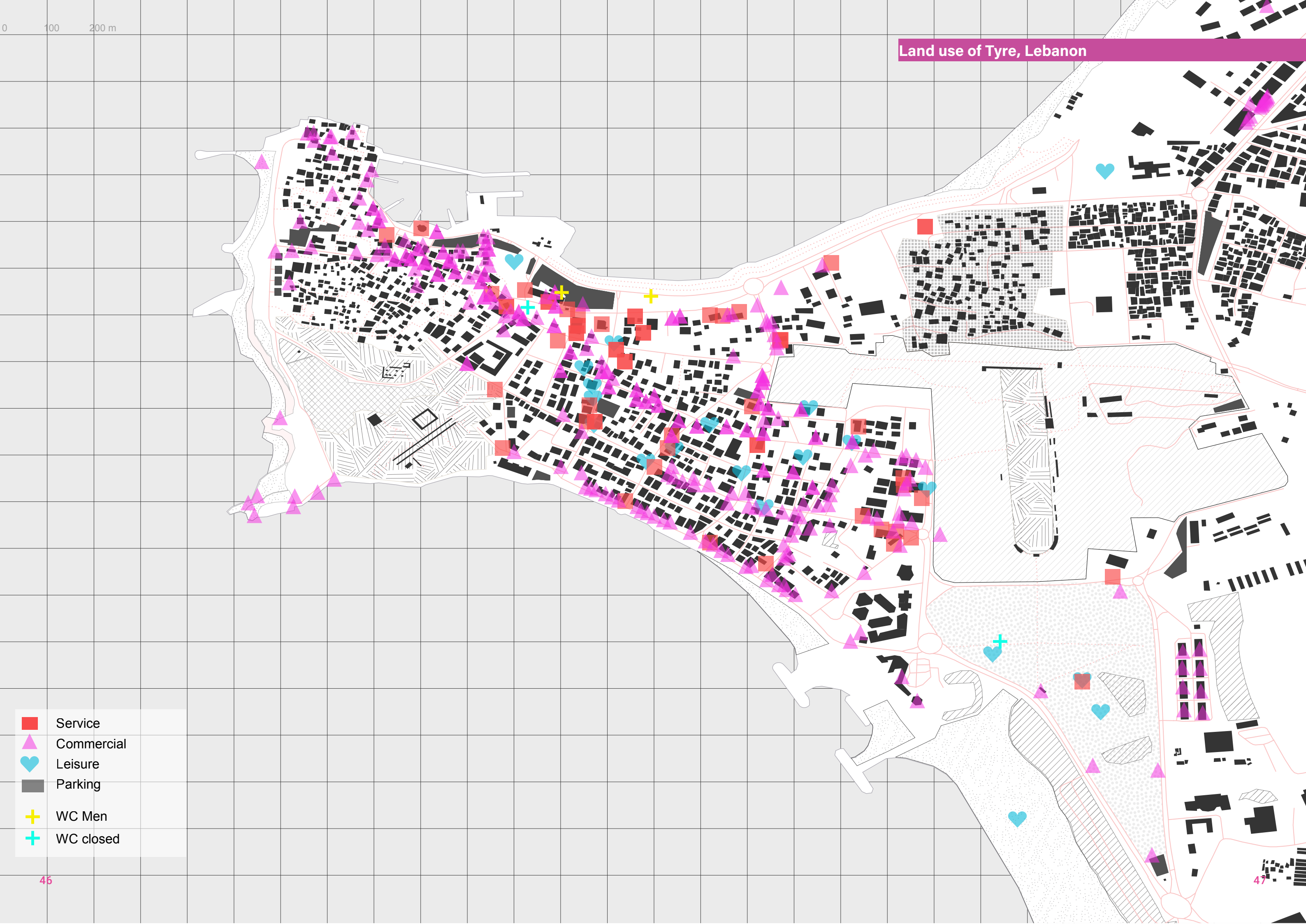
For a further understanding of women’s experiences in public spaces specifically in Tyre, Lebanon I conducted a survey encompassing 34 female participants across diverse age groups, educational and financial backgrounds, and relationship statuses. The outcomes revealed intriguing insights into their interactions with public spaces, particularly in relation to public toilets infrastructures. However the results are aligned with previously mentioned results from different neighborhoods in Beirut.





Land use of Tyre, Lebanon

- Building
- Parking
- Cemetery
- Refugee Camp
- Heritage Site
- Beach
- Rocks
- Heath
- Public Park
- Road
- Foot Path

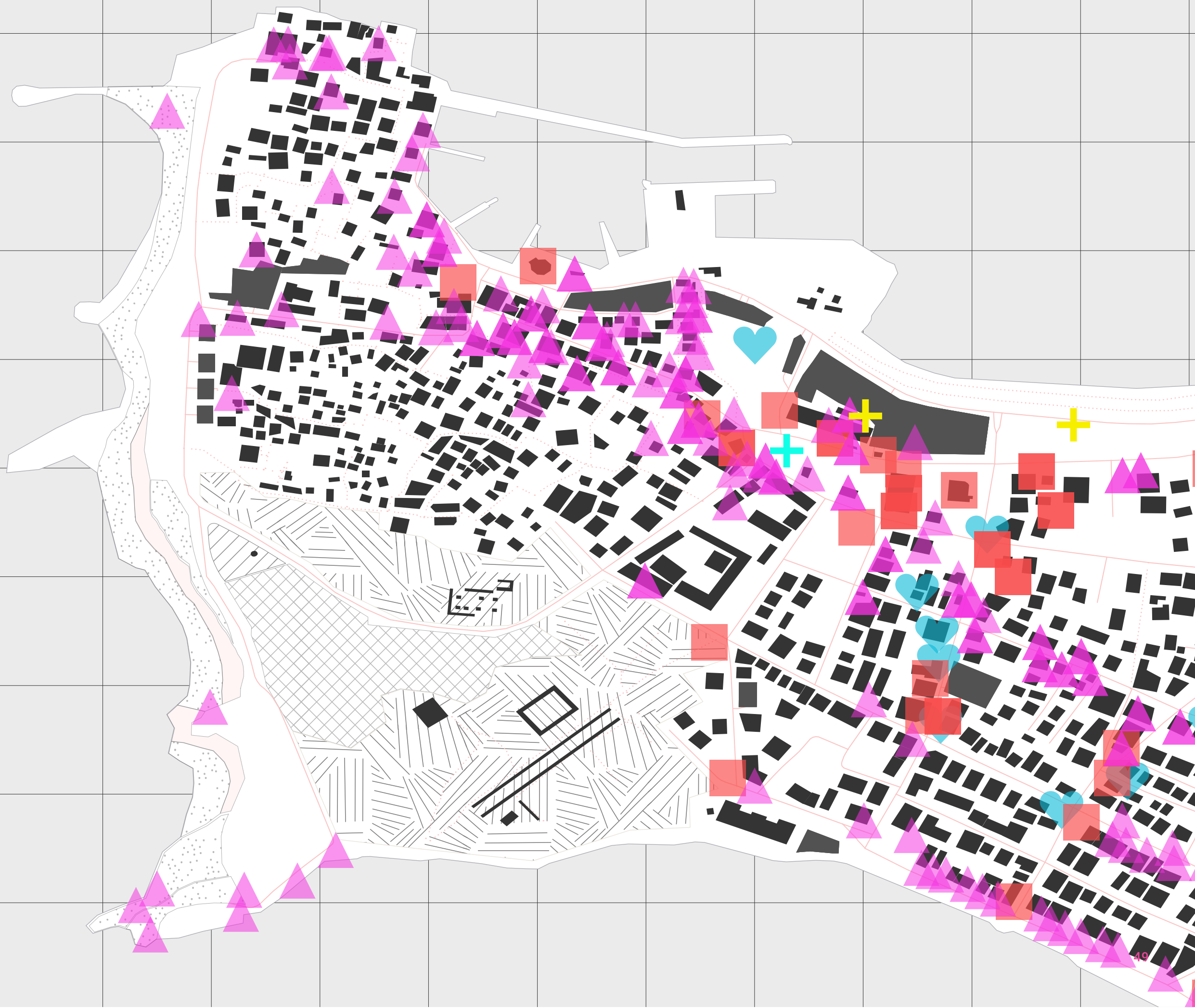


Land use of Tyre, Lebanon

- Service
- Commercial
- Leisure
- Parking
- WC Men
- WC closed

0 100 200 m

Old city



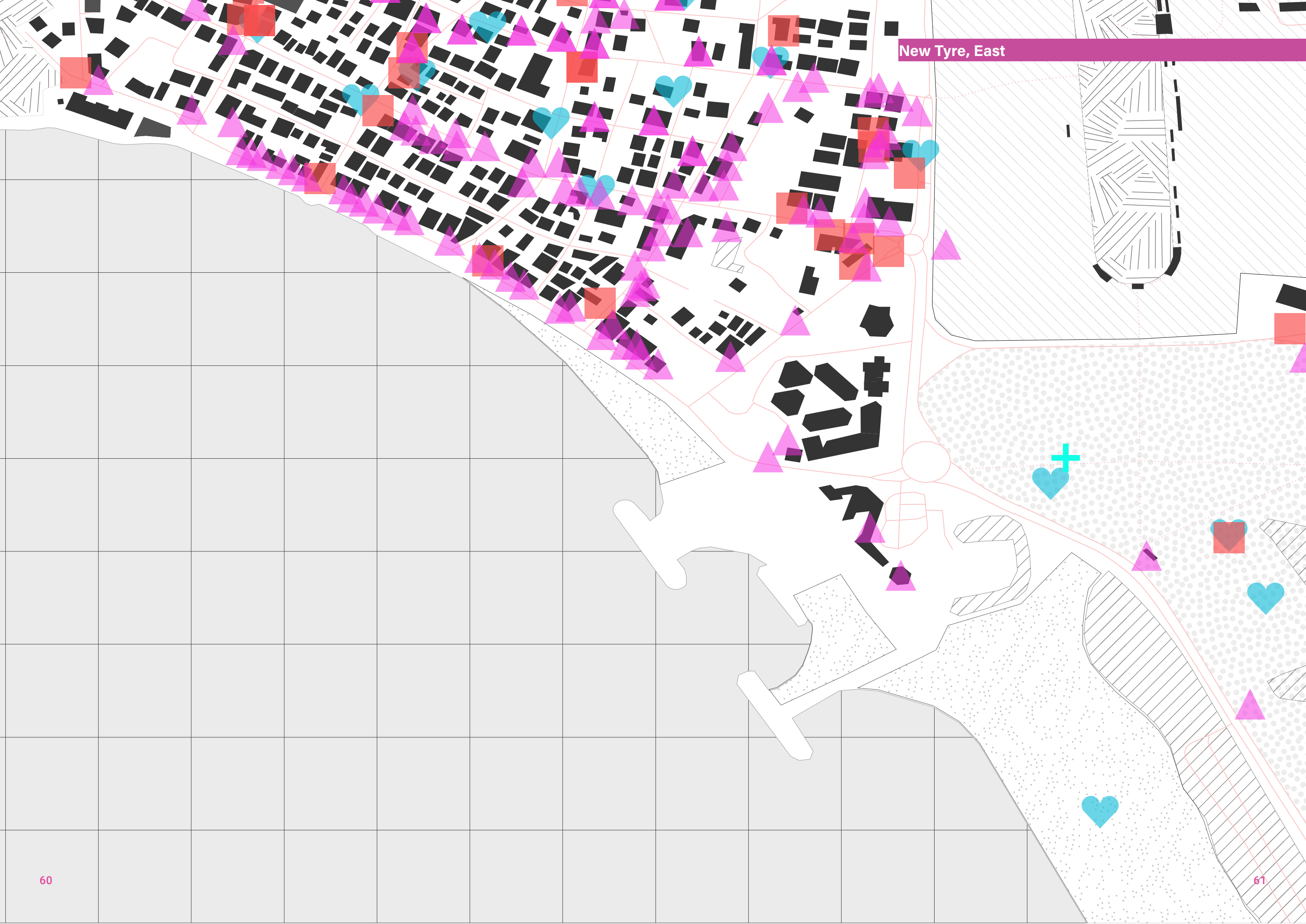


















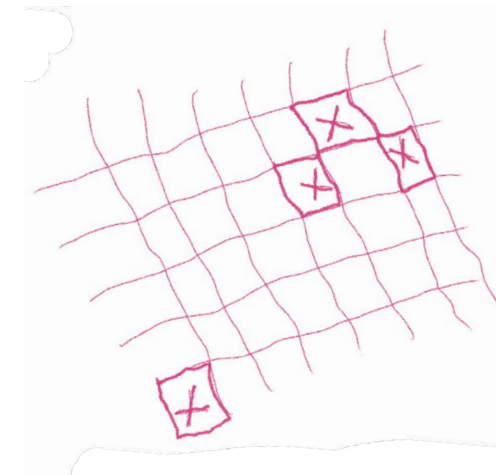
2.2_Status of public toilets

Locating public toilets in Tyre proved to be a challenging endeavor, given the absence of physical or digital maps and signage directing individuals to these facilities. During the site survey conducted in June, inquiries with the municipal police were necessary to identify three public toilets, reportedly the only ones available. The police officer expressed reservations about their maintenance, suggesting that they might be better off closed. A subsequent examination of the toilets corroborated his viewpoint. Concealed in the older part of the city near the souk and port, frequented by both pedestrians and vehicles, this commercial hub caters to lower-income families and draws city tourists. Unfortunately, all three female toilets were closed, while the male toilets, though open, were non-functional. Instances of theft and vandalism were evident, with stolen sink fixtures, broken locks, and leaky pipes contributing to unsanitary conditions. The facilities lacked wheelchair accessibility, and there were no provisions for child care, such as changing tables.

A follow-up visit in September revealed the closure of an additional male toilet, and another public toilet in the public park, despite its relatively new appearance, was also closed. Described as obscure, opaque enclosures, these facilities evoke disdain and annoyance among passersby and lack the necessary maintenance for urgent use.

Remarkably, the survey indicated that only 3 out of 34 participants were aware of their existence. According to Miss Ghaith, a long-time resident, reminiscing about the toilets' initial opening over 15 years ago, she recalled their cleanliness and regular maintenance. However, neglect over time led to their degradation, and she, like many others, now relies on cafes and restaurants when in need.

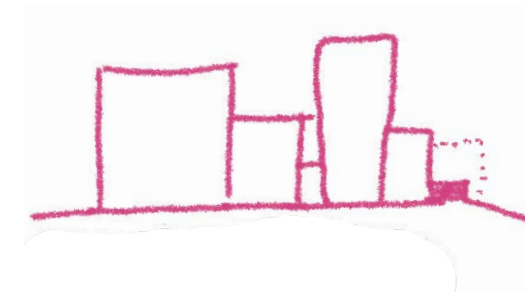
The subsequent survey findings shed light on participants' experiences and expectations concerning public toilets, offering valuable insights for the development of a new public toilet proposal.



Concentrated in one area



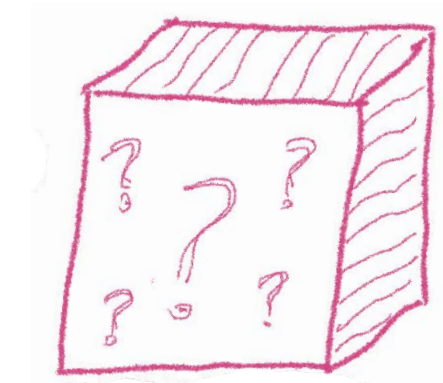
Neglected and broken



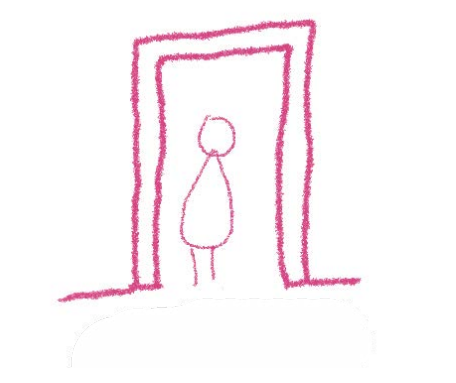
Tucked away



Closed women's facilities

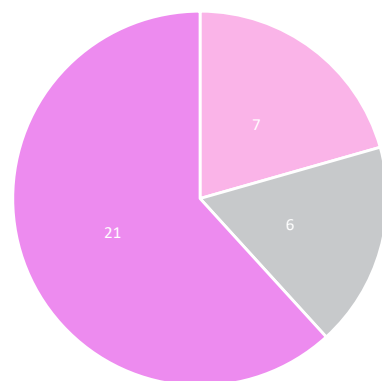


Opaque closed off box

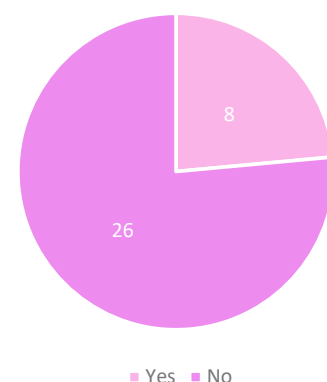


One user group

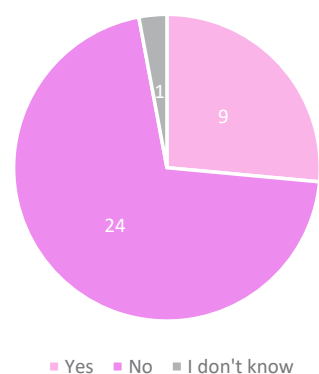
Are there public toilets available for women in your city?



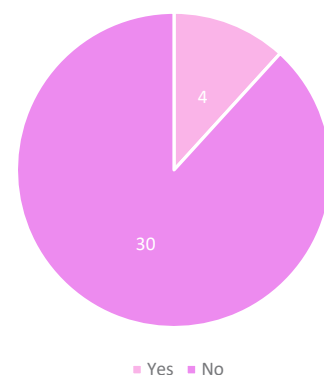
Have you ever faced long waiting times or queues when using public toilets?



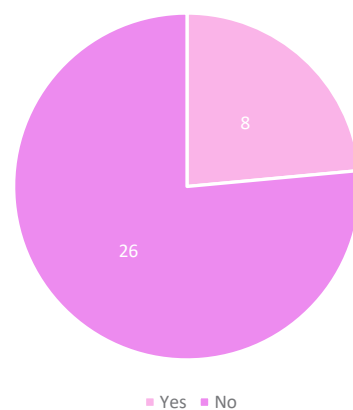
Do you find it easy to locate public toilets when needed?



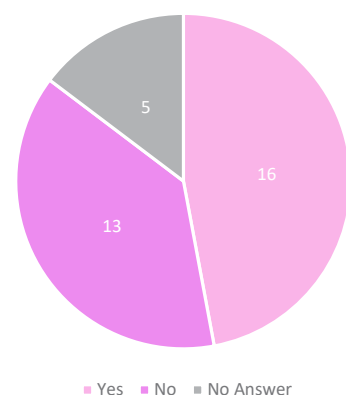
Have you encountered public toilets that provide facilities or resources for menstrual hygiene management?



Have you ever encountered public toilets that require payment for use?



Have you used public toilets that are adequately equipped to accommodate individuals with young children?



These words were given as a response from 34 women in Lebanon when asked what came to their mind when imagining a city that fully supports and uplifts women.

Parking

+

WC Men

+

WC closed



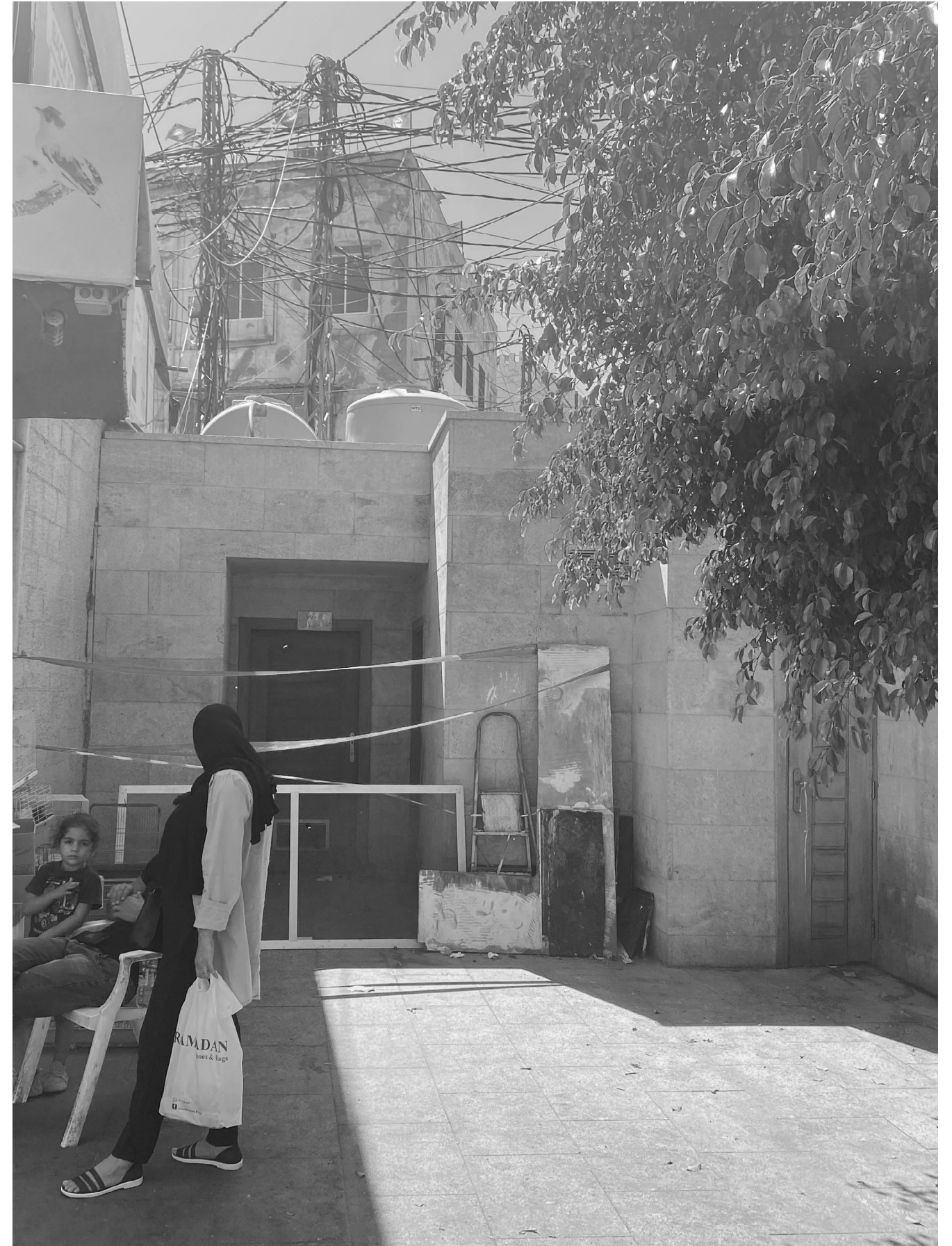


Women's toilet





Men's toilet. June 2023.



Men's toilet closed. September 2023.



Women's toilet is closed, mens is open. September 2023.









Women's toilet





Men's toilet



Sign encouraging users to keep the toilets clean to avoid environmental caused diseases



Women's toilet and storage room, closed and broken lock



Men's and handicapped toilets



Handicapped toilet with high step up. Closed.



Broken lock



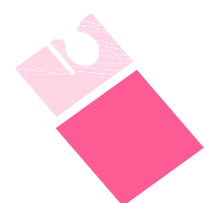
A scene from the movie The Phantom of Liberty by Luis Buñuel

Part III

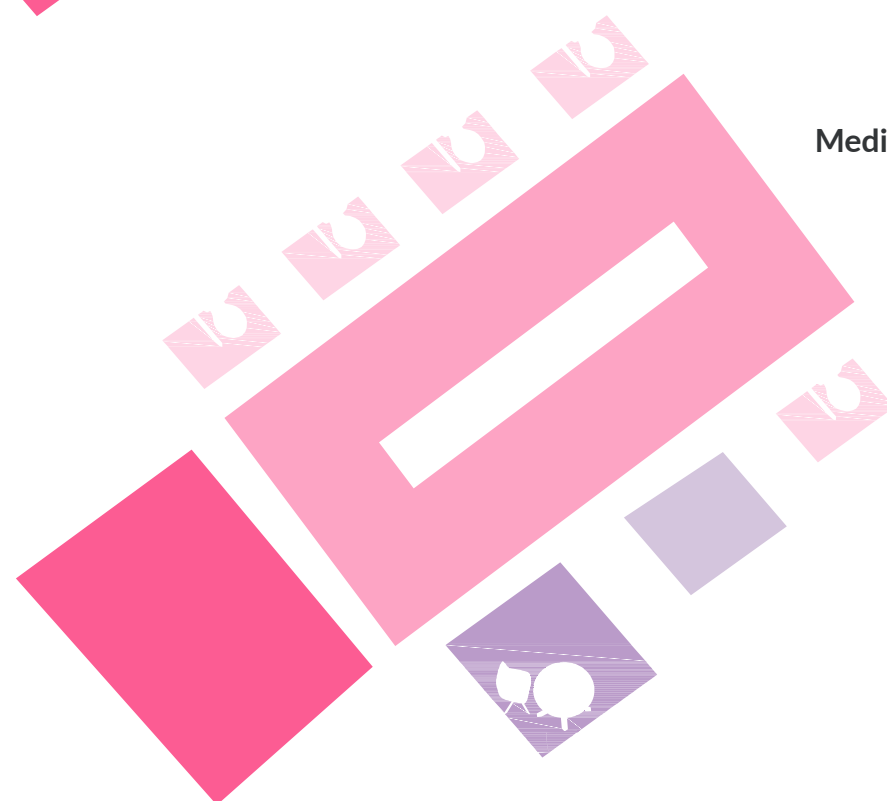
Public Toilets Restated: A Proposal



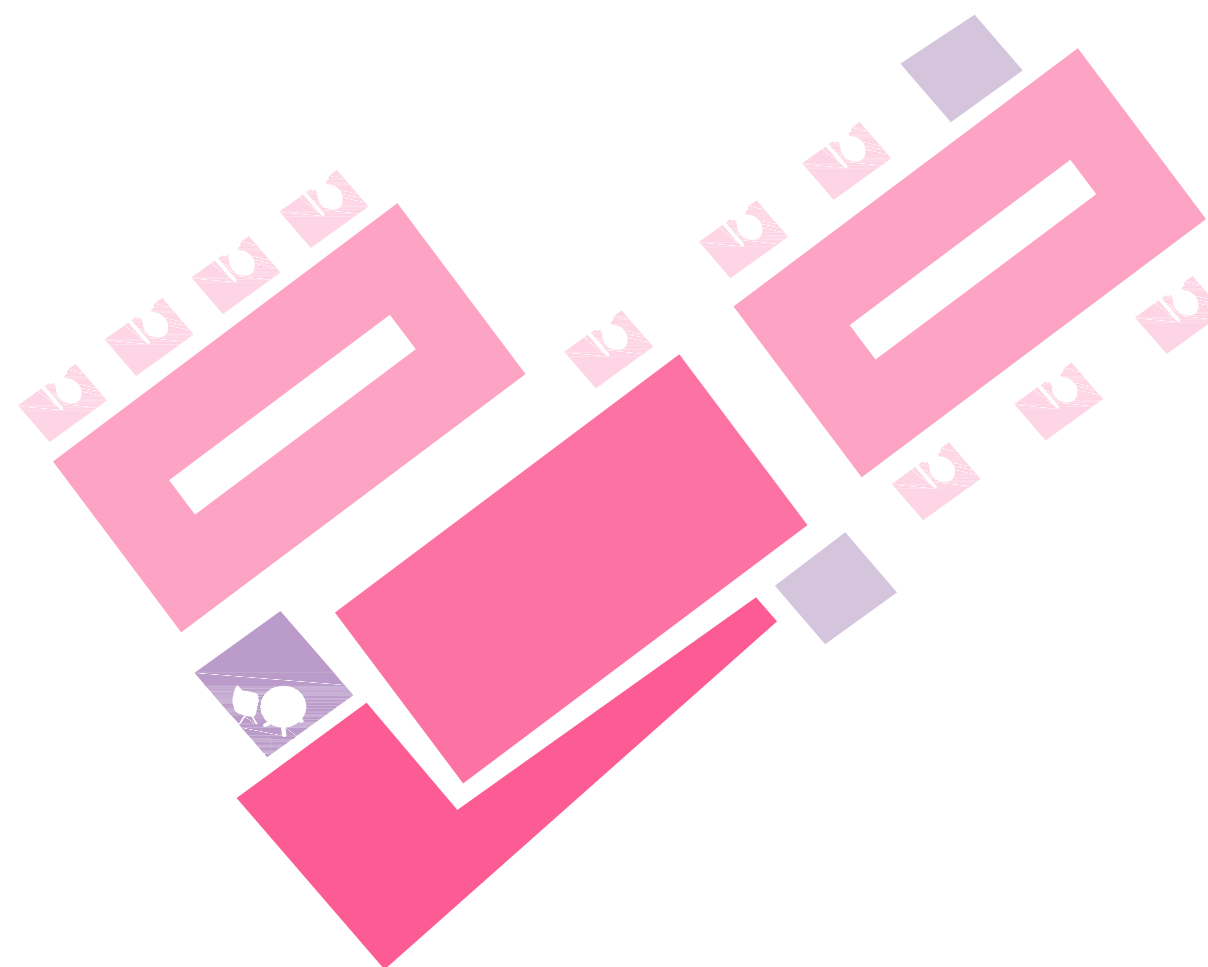
3.1_Three scales of toilets



Small scale

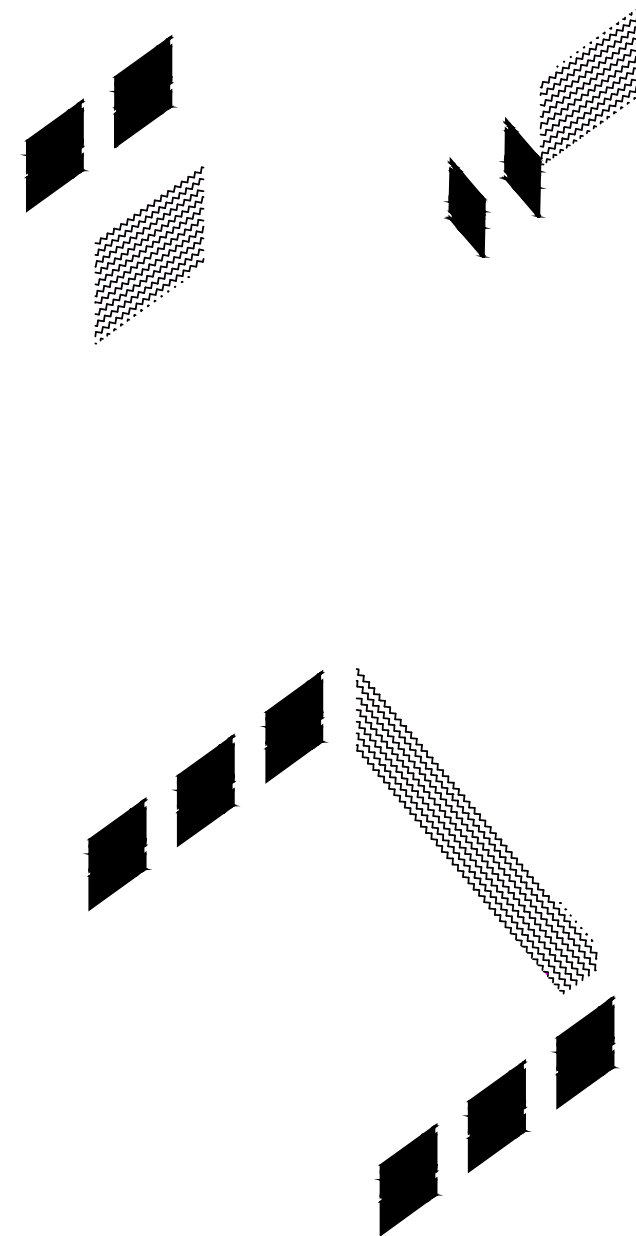
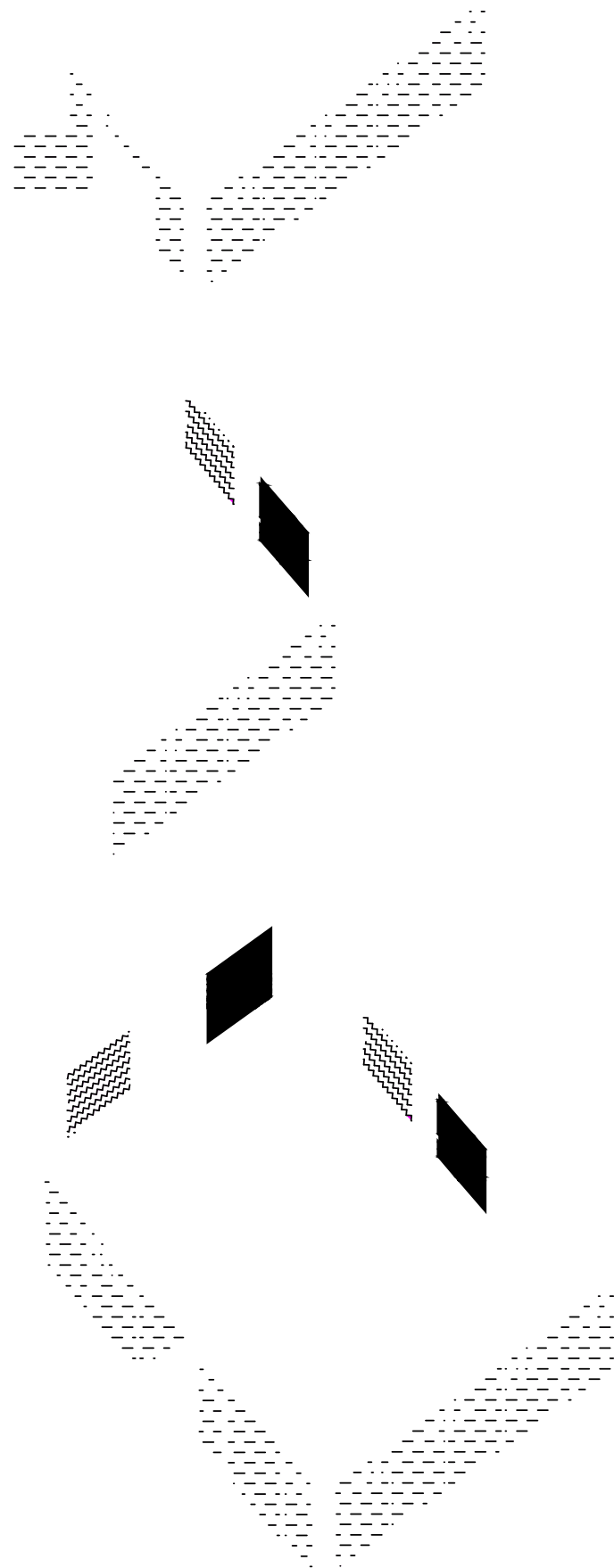
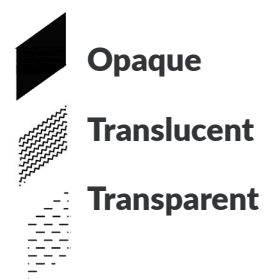


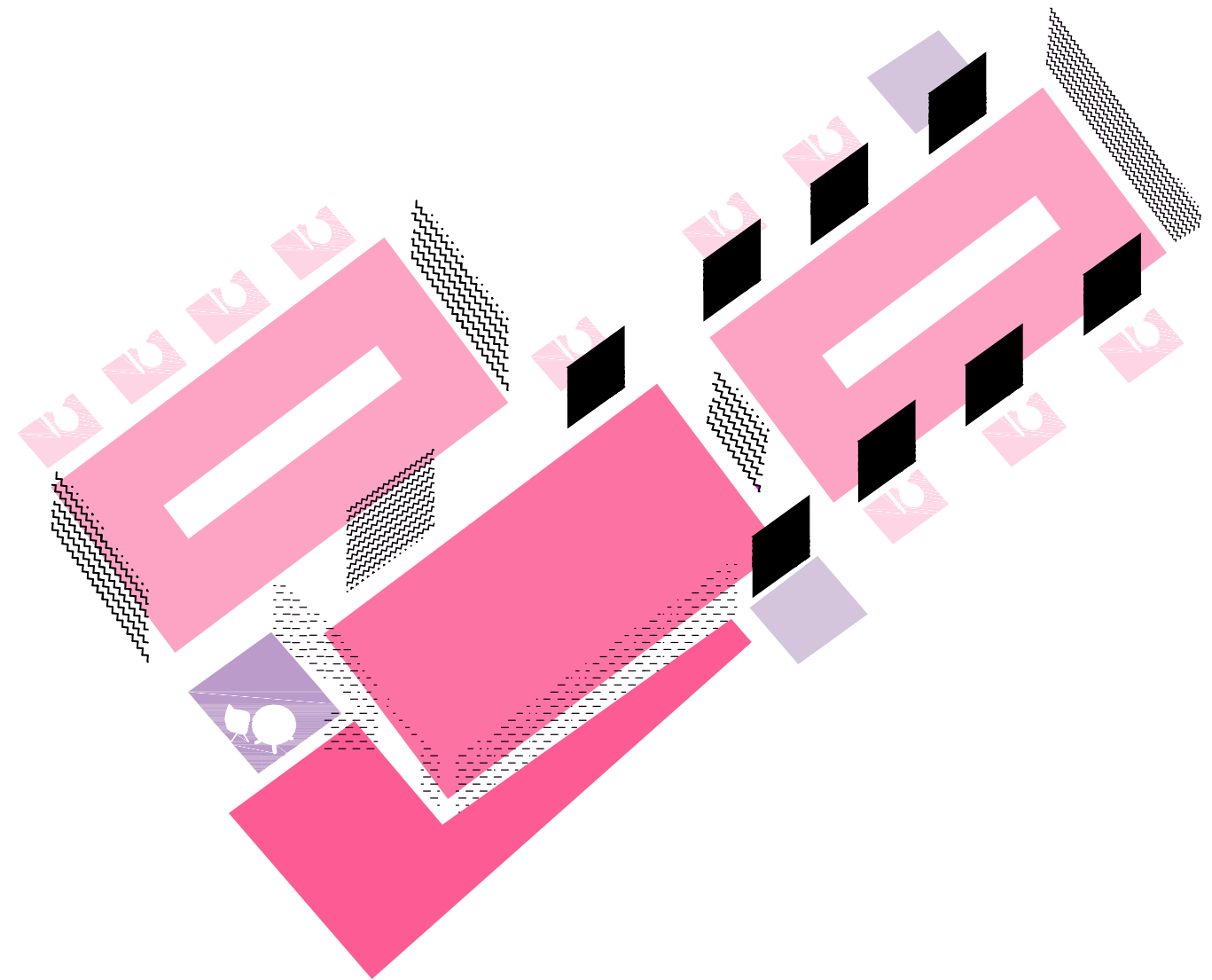
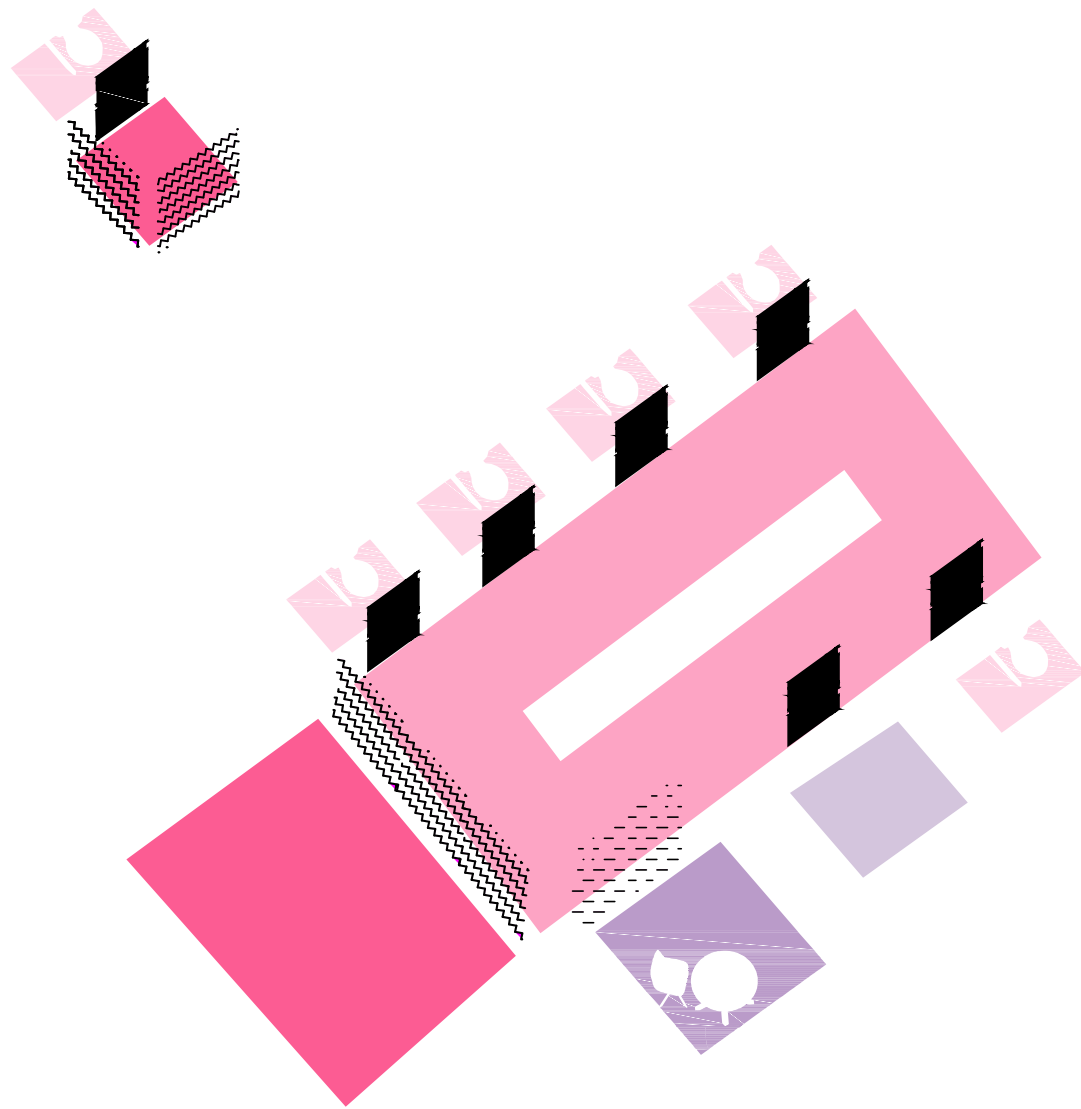
Medium scale

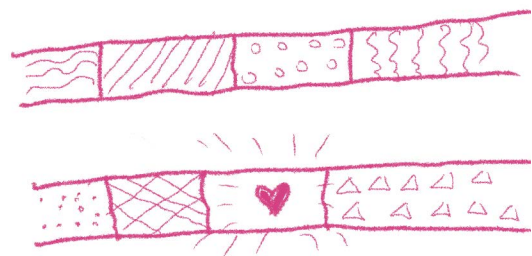
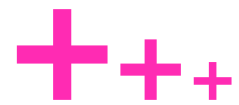


Large scale

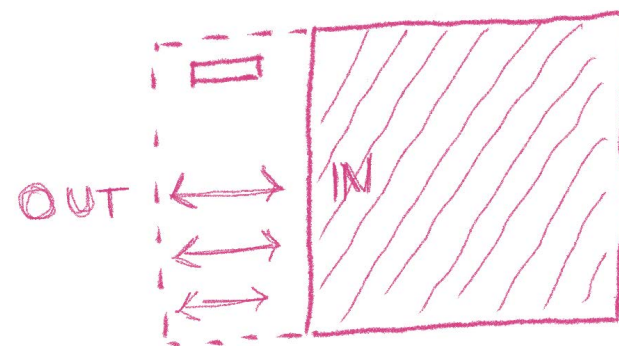
- Entrance
- Waiting area
- Toilet
- Supporting function
- Staff room
- Circulation area







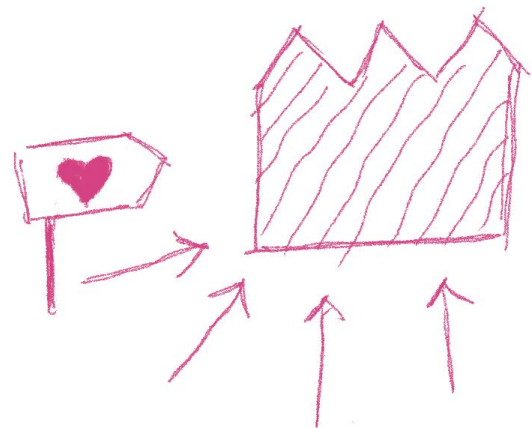
Supportive function



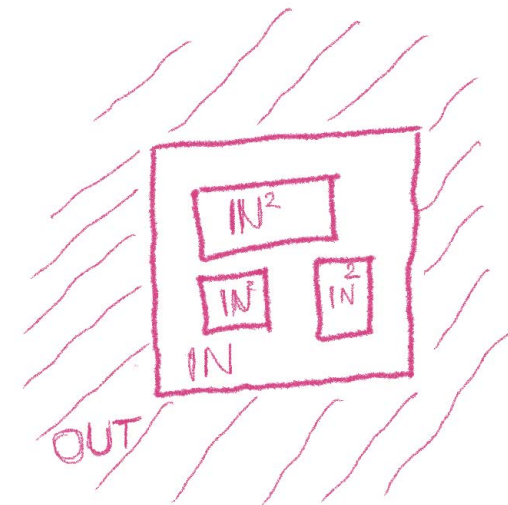
Transitional space between outside and inside



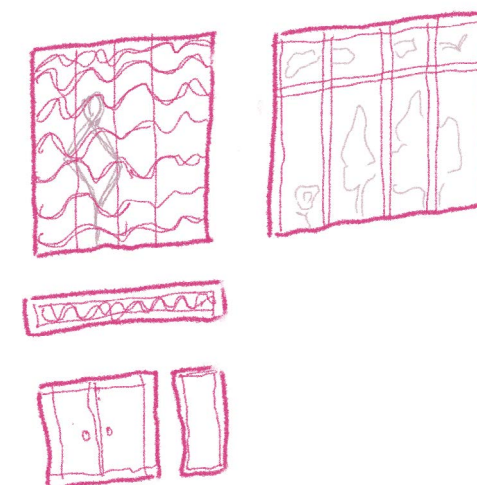
2:1 provision



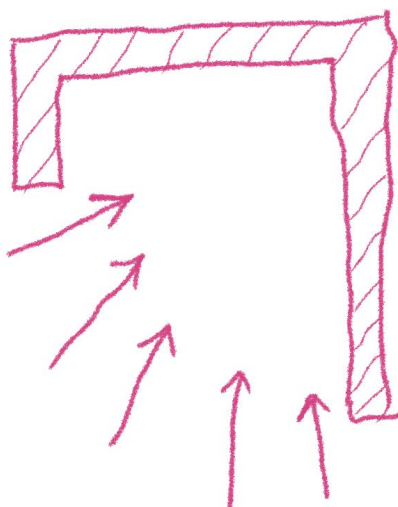
Clear signage and directions



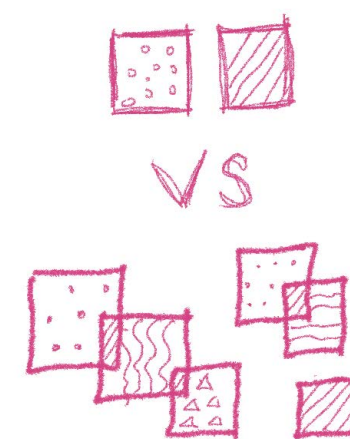
Inside spaces within the inside space



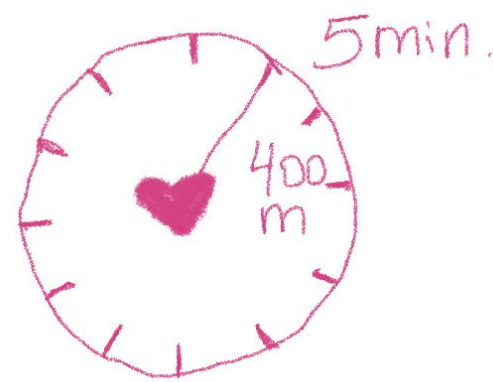
Different layers of porosity



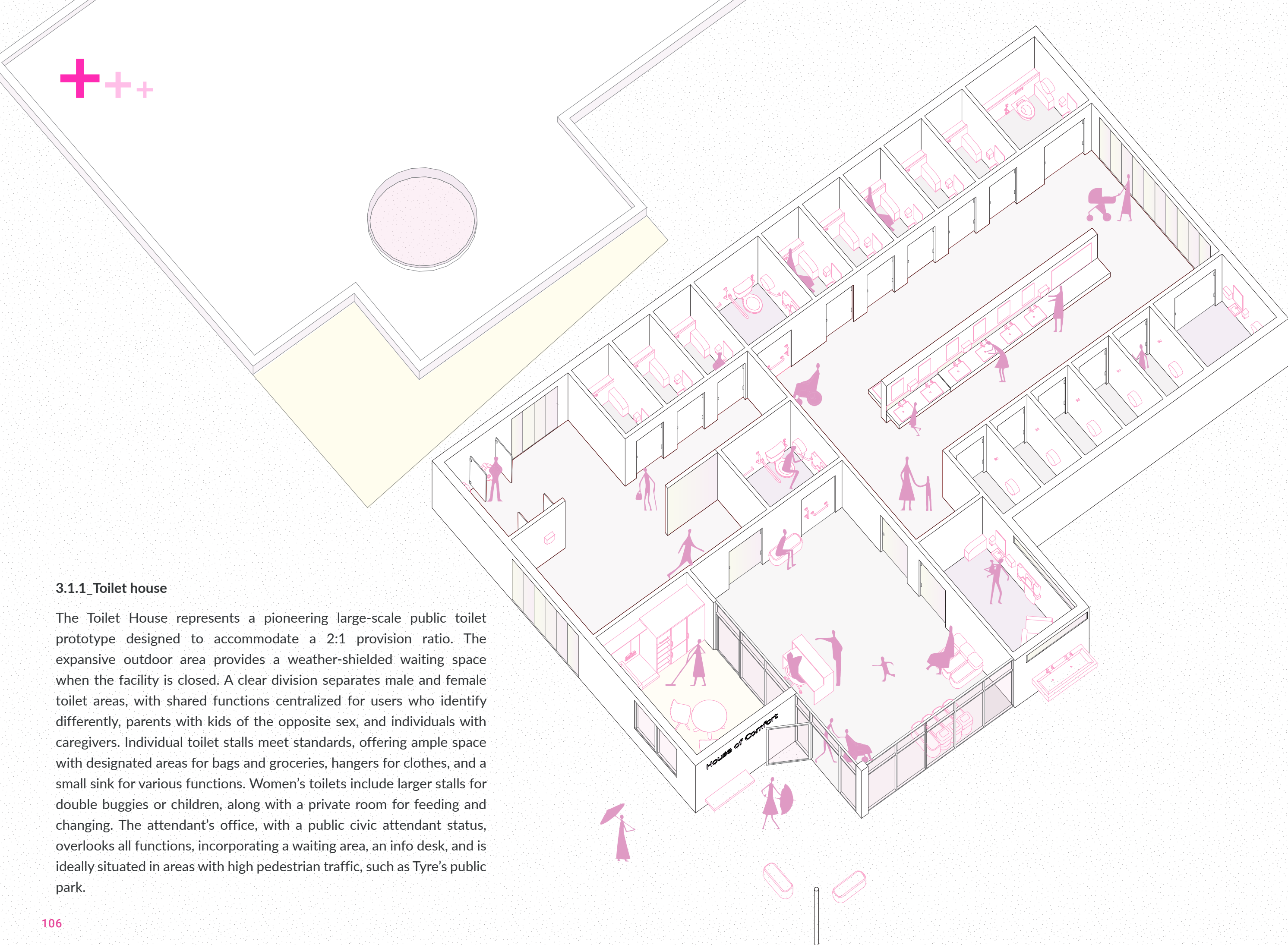
Inviting transparent enclosures



Regulations vs. Standards

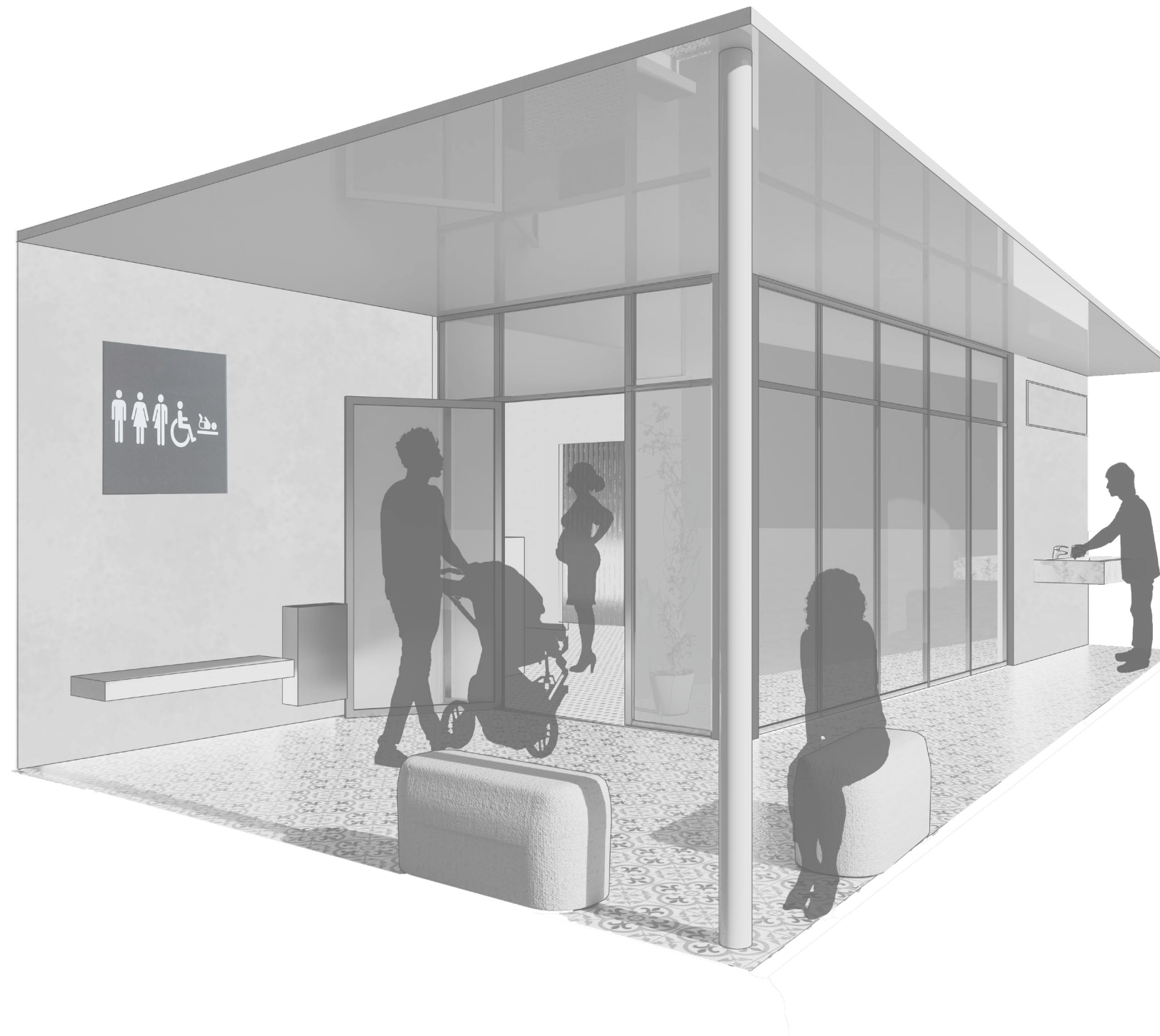


5 minute walking distance to nearest toilet in busy areas

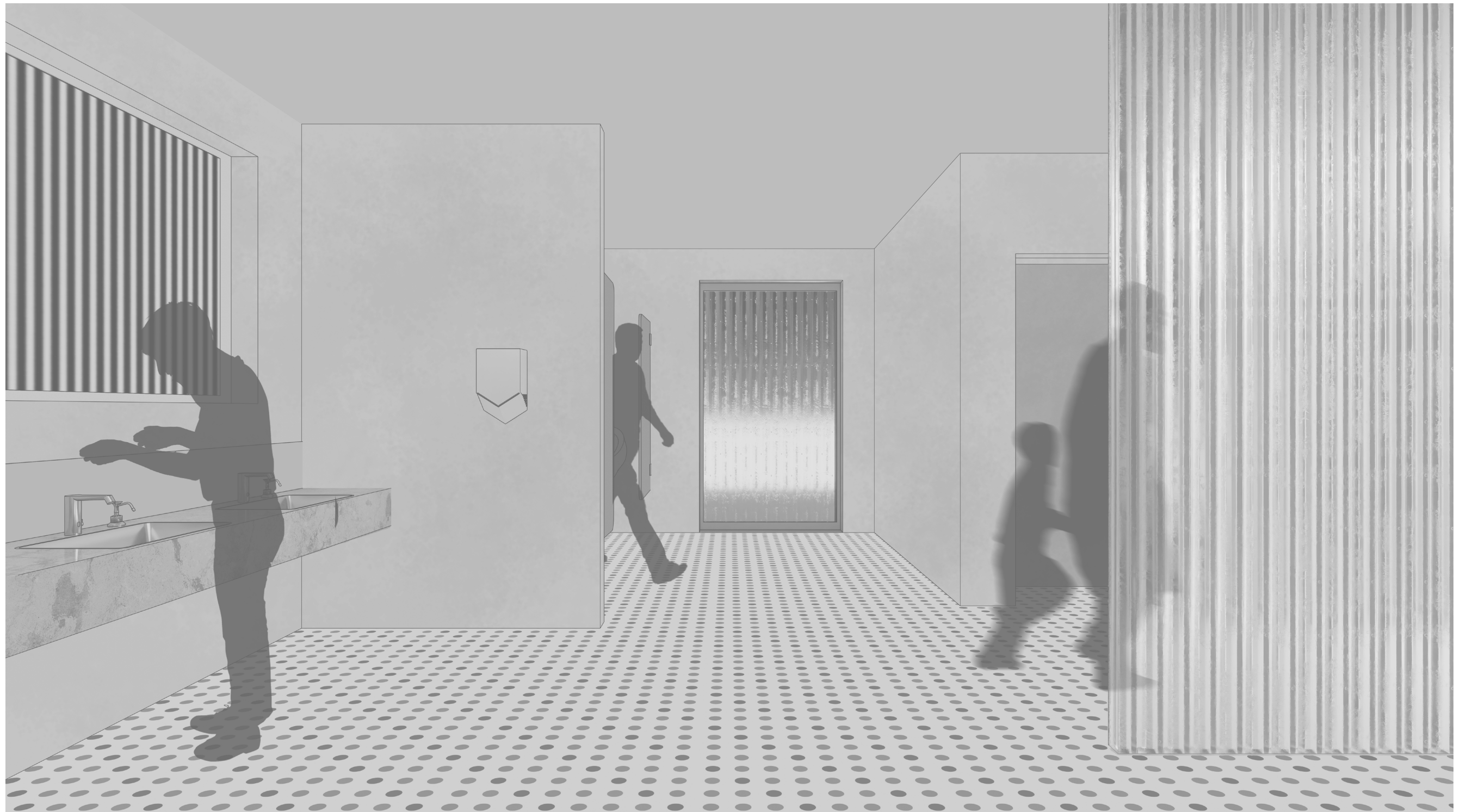


3.1.1_Toilet house

The Toilet House represents a pioneering large-scale public toilet prototype designed to accommodate a 2:1 provision ratio. The expansive outdoor area provides a weather-shielded waiting space when the facility is closed. A clear division separates male and female toilet areas, with shared functions centralized for users who identify differently, parents with kids of the opposite sex, and individuals with caregivers. Individual toilet stalls meet standards, offering ample space with designated areas for bags and groceries, hangers for clothes, and a small sink for various functions. Women's toilets include larger stalls for double buggies or children, along with a private room for feeding and changing. The attendant's office, with a public civic attendant status, overlooks all functions, incorporating a waiting area, an info desk, and is ideally situated in areas with high pedestrian traffic, such as Tyre's public park.



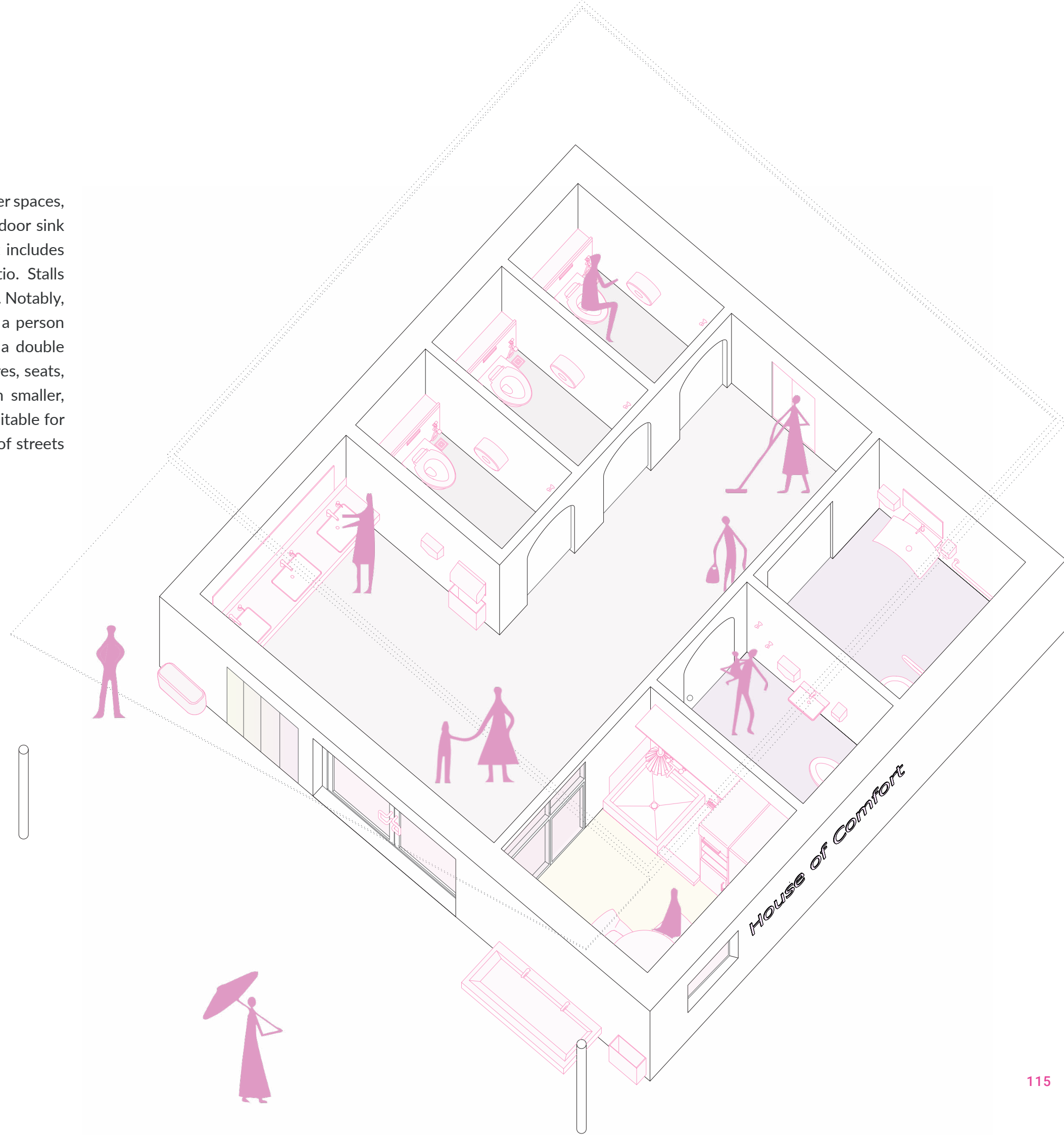






3.2.2_Shared toilets

The Shared Toilets Facility, a mid-scale option suitable for smaller spaces, features a covered entrance with a waiting bench and an outdoor sink for convenience. While lacking separate circulation spaces, it includes individual stalls for men and women in a 2:1 provision ratio. Stalls adhere to standards and provide space for personal belongings. Notably, a spacious gender-neutral handicapped toilet accommodates a person and caregiver, equipped with changing tables and space for a double buggy. Another stall caters to children, featuring smaller fixtures, seats, changing space, and a sink. The attendant's office, although smaller, overlooks the washing space and circulation area, making it suitable for busy areas with less available space, such as the intersection of streets in the old souk.

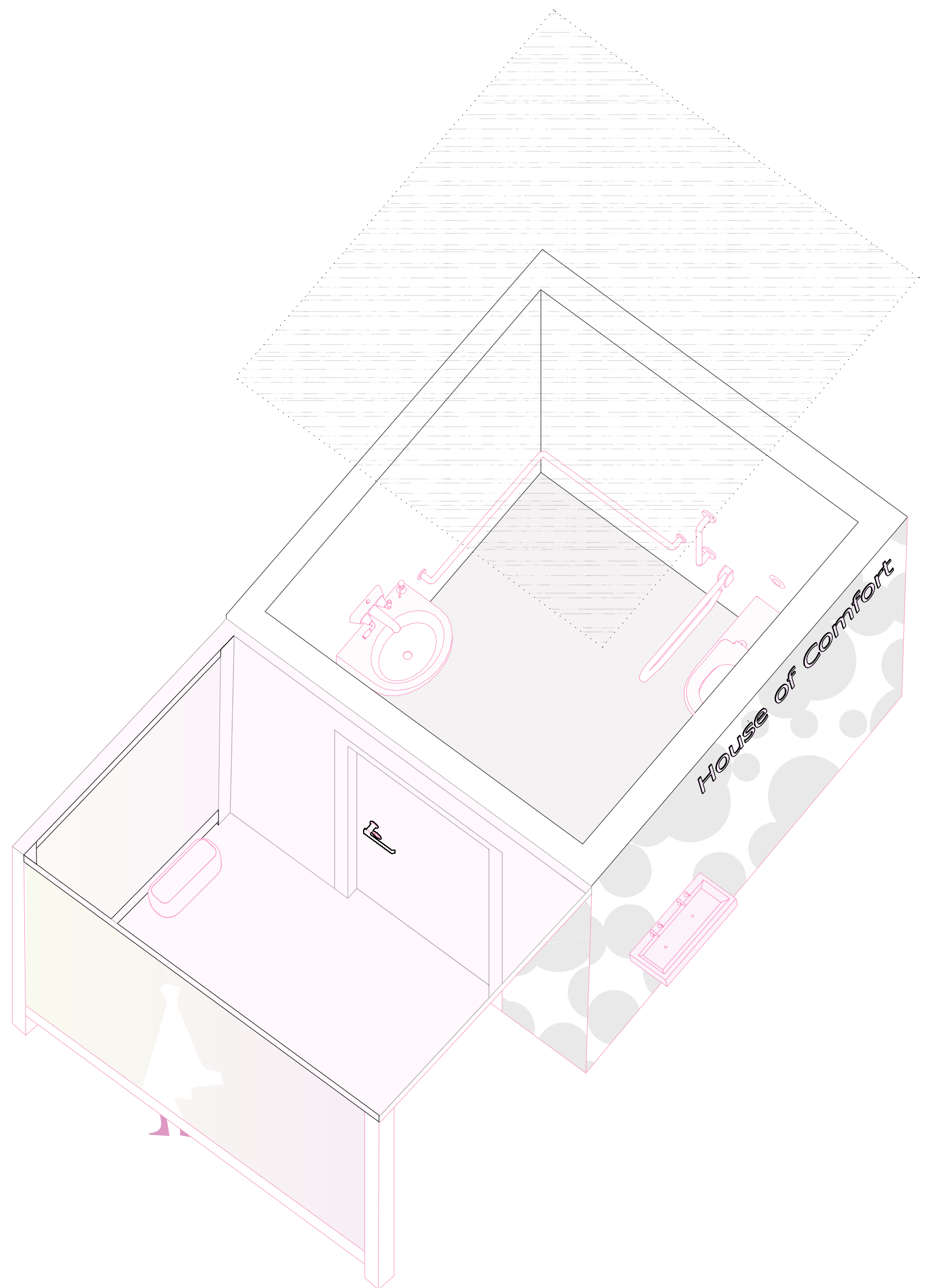






3.2.3_Free standing unisex toilet

The Unisex Single Toilet, the smallest-scale option, incorporates an outdoor waiting space with translucent and transparent elements for a safe transition and visibility. Vandalism-resistant materials, such as steel and internally fixed toilet paper dispensers, are utilized to limit damage in the absence of an attendant. Suited for areas with limited space and lower pedestrian foot traffic, this facility provides a minimum provision. The northwest beach promenade is recommended as an appropriate location for this type of facility.





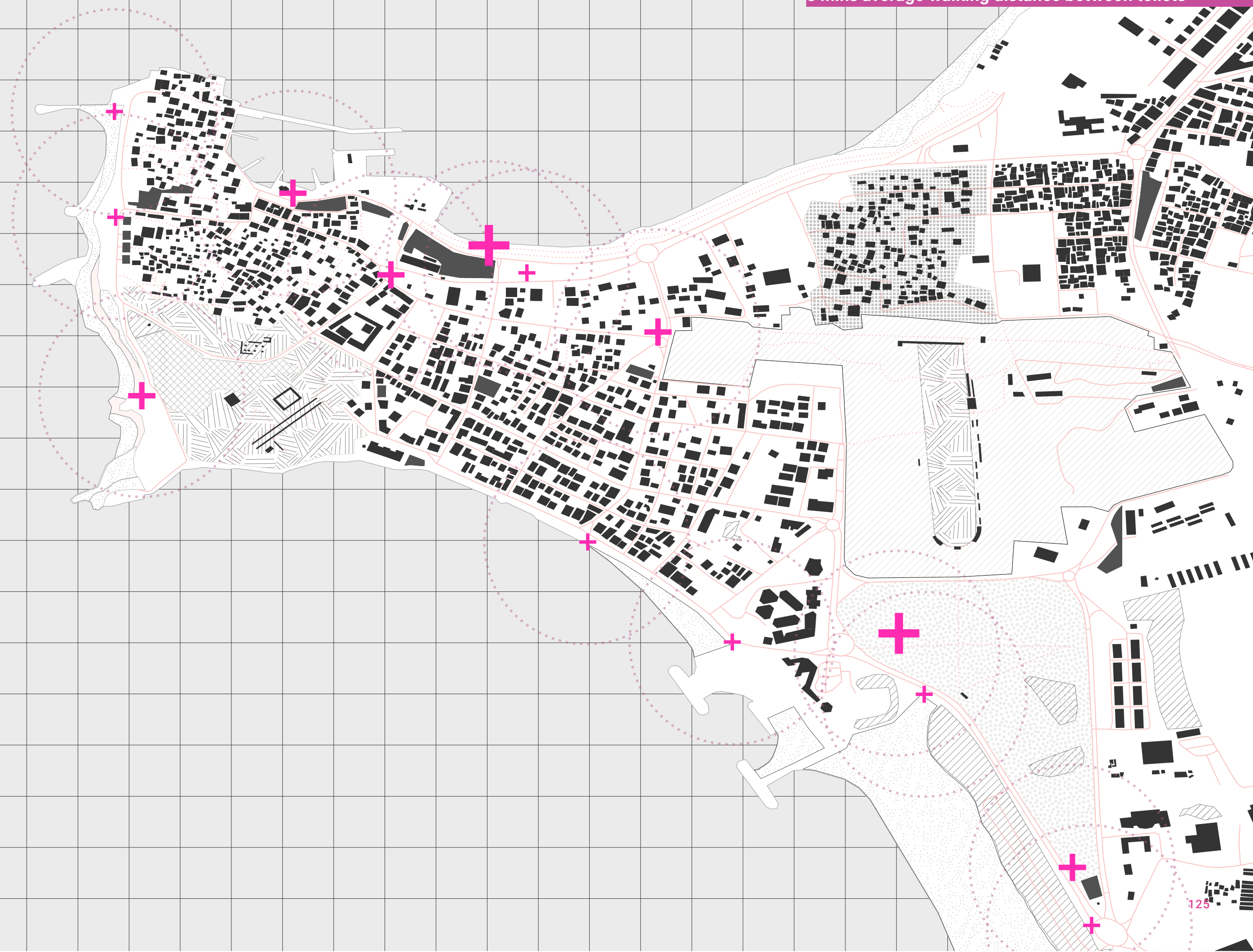
WC House

Share WC

Single WC



5 mins average walking distance between toilets



Conclusion

Women play multifaceted roles in society, and while architecture may not directly alter gender inequalities, it can serve as a supportive framework for women in their diverse roles. Public toilets, often overlooked but integral infrastructures, are as crucial as parks, streets, and other urban functions. Given their direct connection to our bodies and the most natural aspects of human life, designing public toilets that prioritize the needs of women extends to benefiting society at large. Such inclusive design is a step towards ensuring a city that embraces diversity and strengthens women's relationship with public spaces, allowing them to reclaim their place and access to the city. The proposed three toilet scales offer versatile solutions that can be replicated and adapted to different contexts, with the possibility of incorporating additional functions like sewing shops, feet washing, and showers to cater to specific user needs. Public toilets should no longer remain taboo; they are vital health and public facilities capable of fostering healthier and happier communities through thoughtful and inclusive design.

Acknowledgments

This work could not have been done without the help and support of so many lovely people in my life.

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To mama, who taught me that the sky is my limit. To my little moon, Tala. You are everything. To Kimo, for always making me laugh even at the most stressful days. To baba for sharing all his wisdom and love with me, always.

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And last but certainly not least, to all women back home who parent, and work, and fight, and fall, and grow, and resist, and build over and over. The mothers and the daughters and the partners and the friends and the people. I am proud to be one of you.

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