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Article

Reimagining public spaces for a new generation: Gender mainstreaming and inclusive design in future urban landscapes

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Abstract: Public spaces are increasingly shaped by intersecting global challenges, including demographic shifts, technological integration, climate resilience, and social equity. Yet traditional design frameworks often overlook the lived experiences of women, youth, the elderly, and other marginalized groups. This paper addresses a critical research gap by proposing an inclusive public space design model that integrates gender mainstreaming and intergenerational needs into building engineering and spatial planning practices. Drawing on international policy frameworks and empirical case studies from Vienna, Zurich, Luxembourg, and South Africa, the paper outlines a context-sensitive, adaptable model emphasizing safety, digital engagement, social cohesion, and environmental resilience. Evaluative evidence from post-occupancy studies and participatory planning outcomes demonstrates the effectiveness of inclusive approaches. The study contributes a forward-thinking framework that can inform both policy and practice in rapidly urbanizing, socially diverse settings.

Keywords: public spaces; inclusive design; gender mainstreaming; intergenerational design; feminist urbanism; digital inclusion; spatial equity

1. Introduction

Public spaces lie at the core of urban life, serving not only as sites of physical interaction but also as arenas of social identity, cultural expression, and civic engagement. Traditionally, urban public spaces have been designed primarily with considerations of aesthetics, functionality, and infrastructural efficiency. However, such approaches have often failed to address the full spectrum of needs across different user groups, particularly women, children, the elderly, people with disabilities, and other marginalized communities [1,2]. As cities face intensified pressures from rapid urbanization, digital transformation, and environmental uncertainty, conventional public space design paradigms are proving inadequate in addressing the complexities of today's urban societies.

The growing recognition of public space as a site of social inequality and spatial exclusion has prompted a critical shift toward more inclusive and adaptive design strategies. Yet, despite the proliferation of international frameworks promoting inclusion, such as UN-Habitat's New Urban Agenda and SDG 11, there remains a significant research gap in operationalizing these frameworks within local contexts, particularly in African cities. Much of the existing literature either focuses on universal design standards without local adaptation or discusses participation in abstract terms without translating principles into practical planning tools. Moreover, few studies synthesize *gender mainstreaming*, *intergenerational planning*, and *digital engagement* into a coherent model for inclusive public space design. This paper

addresses that gap by offering a forward-looking, integrated model for inclusive public space design, bridging gender equity, intergenerational needs, digital connectivity, and spatial resilience. The novelty of this study lies in its interdisciplinary approach, combining insights from feminist urbanism, environmental psychology, and building engineering to reimagine public spaces for a changing urban demographic. Drawing on empirical case studies from Vienna, Zurich, Luxembourg, and South Africa, the paper identifies practical mechanisms, including participatory planning methods, spatial audits, and post-occupancy evaluations, that have proven effective in producing inclusive outcomes. These international examples are critically contextualized within the South African urban experience, where inequality, historical legacies, and infrastructural deficits pose distinct challenges.

The emergence of *hybrid public spaces*, which blend physical infrastructure with digital layers of interaction, further underscores the need for inclusive design principles. These spaces offer new opportunities for participation, connection, and visibility but also risk deepening exclusion if not thoughtfully planned [3]. Gender mainstreaming serves as a critical framework in this context, enabling planners to interrogate and dismantle the patriarchal assumptions embedded in spatial policy and design. It addresses not only physical infrastructure but also mobility, safety, access to amenities, and perceptions of belonging [4,5]. When coupled with intergenerational planning, an approach that promotes cross-age engagement and accommodates diverse needs across the life course, gender mainstreaming provides the foundation for inclusive, responsive public environments [6,7].

The COVID-19 pandemic further reinforced the urgency of this agenda. Social distancing and lockdown measures exposed structural inequalities in access to public space, digital infrastructure, and green amenities, prompting a global revaluation of how cities care for their most vulnerable populations [8,9]. This article thus explores how inclusive design can be practically applied to future-oriented public space development. Through the integration of theoretical insight, policy analysis, and real-world case studies, it proposes a holistic framework for planning public environments that reflect the complex realities of contemporary urban life. The paper argues that inclusive public spaces must move beyond basic accessibility to actively promote belonging, agency, and visibility for all users in an increasingly diverse, interconnected, and precarious world.

2. Literature review

The literature review builds on the foundational argument introduced earlier, that public spaces must evolve to reflect the changing needs of a diverse, interconnected urban population. Historically, the planning and design of public spaces were informed by utilitarian models that emphasized efficiency, vehicular traffic flow, and economic performance, often to the exclusion of social and cultural considerations. This technocratic approach, while functional, overlooked the everyday experiences and spatial needs of marginalized groups, including women, children, the elderly, and low-income residents. In response, a growing body of urban scholarship has called for a rethinking of public space through the lens of inclusivity, equity, and resilience. This section examines the evolution of public space theory and practice, with particular

attention to gender mainstreaming, intergenerational design, and participatory planning. Drawing from both international exemplars and critical urban studies, it explores how contemporary cities are reimagining public space to serve as inclusive, democratic, and adaptive environments that enable belonging for all users.

2.1. Gender mainstreaming in public spaces

Gender mainstreaming in urban planning emerged as a critical approach in the 1990s, spurred by global movements for gender equality and the recognition of women's rights to public space. One of the foundational texts on this subject is the work by Hanson [10], which introduced the concept of "gendered space" in cities. This term reflects how space is produced and experienced differently based on gendered roles, societal expectations, and power relations. In urban settings, gender mainstreaming refers to designing spaces that not only account for but also actively promote gender equity and ensure that women and other marginalized groups have equal access to urban resources, opportunities, and safety.

Vienna, Austria, is one of the cities that has been particularly successful in integrating gender mainstreaming into public space design. The city's commitment to gender-responsive planning can be traced back to the early 2000s, when gender issues were formally incorporated into municipal planning regulations. Vienna's Gender Mainstreaming Strategy, which includes a focus on public spaces, promotes accessibility and safety for all genders, with particular attention given to women's safety and mobility [11]. The city's approach involves a comprehensive evaluation of public spaces, considering how their design impacts women's ability to use them freely.

For example, the city has invested in lighting improvements, improved surveillance through the design of open spaces, and the reimagining of transportation systems to ensure women feel safe and comfortable using public spaces at any time of day or night. Vienna's approach has been particularly influential in rethinking urban mobility. Public transportation in Vienna is designed with a focus on safety and accessibility, ensuring that stations, bus stops, and other transit points are well-lit, well-monitored, and easy to navigate for people of all genders and ages [12]. In public spaces such as parks and plazas, design principles prioritize visibility, security, and the inclusion of spaces for women's specific needs, such as places for children's play and designated areas for caregivers. By focusing on these elements, Vienna has become a leader in promoting gender-inclusive urban planning and design.

2.2. Inclusive public spaces: International case studies

Beyond Vienna, other cities worldwide have also adopted innovative practices in creating inclusive urban environments. Zurich, Switzerland, consistently ranks as one of the most inclusive cities globally. The city is known for its comprehensive approach to urban planning, which places a strong emphasis on creating public spaces that accommodate diverse social, cultural, and age-related needs. Zurich has implemented policies that prioritize social cohesion, environmental sustainability, and equitable access to urban resources [13]. A particularly noteworthy example is Zurich's approach to participatory planning, which involves engaging communities, including

women and marginalized groups, in the design process. This participatory method ensures that the voices of all residents are heard, contributing to more inclusive and representative public spaces. For instance, Zurich's efforts to improve access to green spaces and create child-friendly areas in urban settings have been lauded as significant steps toward inclusivity [14].

Another example of inclusive public space design is Luxembourg City, Luxembourg. As the capital of one of the wealthiest countries in Europe, Luxembourg City has been a pioneer in creating accessible and gender-sensitive public spaces. The city's public spaces have been designed to meet the needs of people with disabilities, women, children, and older adults. Urban planners in Luxembourg emphasize the importance of safety and ease of use, particularly in transportation networks and public parks. For example, Luxembourg's pedestrian-focused urban spaces ensure that women and families can easily navigate the city without concerns for personal safety [15]. The integration of smart technologies, such as real-time crowd management systems and enhanced lighting for safety, also plays a significant role in ensuring that public spaces are accessible and secure for all citizens.

Table 1. Inclusive design features in international public spaces: Case studies from leading cities.

City	Design features that make them inclusive
Vienna, Austria	Gender-responsive urban planning policies, focusing on safety, accessibility, and women's mobility [11] Public spaces designed with input from women, ensuring safer and more accessible environments, especially in parks and transportation hubs. Enhanced lighting, open space visibility, and multi-functional public areas that serve various community needs.
Zurich, Switzerland	Participatory planning processes, involving diverse social groups, including women and marginalized communities [14]. Focus on social cohesion, access to green spaces, and child-friendly public areas. Policies for enhancing accessibility and public safety [13].
Luxembourg City, Luxembourg	Accessible public spaces designed for all ages, including older adults, children, and people with disabilities [15]. Inclusive public transportation networks designed for ease of access for women and families. Focus on safety, accessibility, and ease of navigation across public spaces.
Copenhagen, Denmark	Intergenerational public spaces designed to foster interaction between different age groups [16]. Child-friendly parks and spaces for elderly engagement, designed to be multi-functional. Enhanced pedestrian infrastructure to ensure safety and mobility for all residents.
Barcelona, Spain	Focus on pedestrian-centric design, with an emphasis on universal access and social inclusion [3]. Public spaces that foster social interaction and community engagement, with areas designed for people of all abilities and ages. Promotion of cycling infrastructure, creating a safe and sustainable transportation environment for all.

Source: By author, adapted from Peric, Menz and Ricci [14], Stadt Wien [11], Weedy [15], Simpson [16], Gehl [3], Dymen and Ceccato [13].

These global examples illustrate that while public space design is influenced by local cultural, social, and political contexts, the principles of inclusivity and gender mainstreaming can be universally applied. **Table 1** highlights the inclusive design features that set inclusive cities apart in their efforts to create public spaces that cater to a diverse range of users, demonstrating how inclusivity can be embedded into urban planning practices. Cities such as Zurich, Vienna, and Luxembourg are at the forefront of this movement, demonstrating that urban spaces can be designed to foster inclusivity, accessibility, and safety, ultimately improving the quality of life for all urban residents.

While inclusive urban design is often conceptualized at the physical level, through lighting, seating, walkability, and safety features, its success hinges on the processes through which decisions are made. In cities like Vienna, Zurich, and Luxembourg, inclusive public space design has been shaped not only by technical expertise but also by participatory processes that engage a wide cross-section of the population, including those who are often excluded from public discourse, such as women, migrants, elderly persons, youth, and the disabled. Vienna is internationally recognized for its gender-sensitive approach to urban planning, and central to its success has been the institutionalization of participation. The Viennese administration, particularly through the Urban Planning Department (MA18), established the "Gender Mainstreaming in Urban Planning" program as early as the late 1990s. One of its most cited interventions involved "gender-sensitive walk-alongs," where planners conducted public space audits with diverse groups of women to gather real-time, embodied feedback about their experiences of safety, comfort, and mobility [17]. These walk-alongs have since been institutionalized into the city's urban development protocols, enabling city officials to collect spatial data grounded in lived experience.

In Zurich, participatory planning has been shaped by a combination of bottom-up and top-down approaches. The city's use of mobile consultation kiosks, referred to as *Mitwirkungsboxen*, brought planning dialogues directly into neighborhoods. These mobile units were placed in parks, transit hubs, and housing developments to encourage input from residents in informal, low-barrier settings. This was particularly successful in reaching migrants and lower-income populations who may not typically attend formal planning meetings [18]. Zurich also integrates participatory budgeting in specific districts, which allows residents to decide how small public space funds are allocated, a method that increases direct engagement and ownership.

Luxembourg, though smaller in scale, has also pursued targeted participatory inclusion. The administration collaborates with the University of Luxembourg's Institute of Geography and Spatial Planning to run "urban living hubs", temporary experimental spaces where diverse groups test urban design prototypes. These are particularly effective for engaging youth and the elderly, who are encouraged to interact with space and provide feedback before permanent installations are made. Moreover, Luxembourg's planning office actively works with migrant associations to co-create culturally inclusive public spaces, recognizing the city's high proportion of foreign-born residents [19]. Across these three case studies, successful participatory planning relies on three core principles: accessibility (bringing consultation to people), legitimacy (collaborating with trusted intermediaries such as NGOs, schools, or cultural centers), and accountability (demonstrating how input leads to actual design outcomes). These strategies challenge the assumption that only those fluent in formal political processes can shape cities. Instead, they reaffirm the principle that inclusive design must be grounded in inclusive governance.

These lessons underscore that participation is not simply a procedural formality but a substantive act of design co-creation. They serve as important reference points for lower-income cities, such as those in South Africa, seeking scalable and culturally appropriate ways to integrate marginalized voices into the making of public space.

2.3. Intergenerational design: The need for space for all ages

The concept of intergenerational design has emerged as an essential framework in urban planning, advocating for the creation of public spaces that cater to people across all age groups, such as children, youth, adults, and the elderly. Traditionally, urban spaces were designed with a primary focus on functionality, transportation, and economic activity, often overlooking the varied needs of different age groups; however, as cities evolve to accommodate more diverse populations, it has become crucial to design public spaces that promote inclusivity, foster community engagement, and ensure that individuals of all ages can participate in social, recreational, and cultural activities. Intergenerational design refers to the intentional planning of urban spaces that allow different age groups to interact, share experiences, and benefit from the space's amenities. This concept emphasizes the need to design spaces that are universally accessible, with features that facilitate social interaction, safety, and accessibility for all. **Table 2**, tabulates the key principles of intergenerational design include universal access, safety, mobility, engagement, and inclusion.

Table 2. Key principles of intergenerational design.

Principle	
Accessibility	Intergenerational public spaces must be physically accessible to people of all abilities. This includes features such as wheelchair ramps, smooth walkways, wide entrances, and sufficient seating for elderly individuals or those with mobility challenges. Accessibility also extends to digital spaces, where older adults may need support in navigating technologies integrated into public spaces [11].
Safety	Safety is a primary concern in the design of intergenerational spaces. These spaces must be designed to minimize risks for all users, particularly vulnerable groups such as children and the elderly. Safe spaces can be created through thoughtful lighting, visible sightlines, secure play areas for children, and measures to prevent accidents or injuries [12].
Social interaction	Intergenerational spaces encourage different age groups to engage with one another. This can be achieved through the design of communal areas, multi-purpose spaces, and activity hubs where children, adults, and elderly residents can interact. For example, playgrounds that are located near seating areas for adults allow for adult-child interaction while ensuring that the elderly can engage socially in a comfortable space.
Multifunctional spaces	Intergenerational spaces are often multifunctional, meaning they can be used for a wide range of activities. These spaces can serve as gathering places, recreational areas, event venues, and relaxation zones. Designing spaces with flexible functions ensures that they meet the diverse needs of various age groups, whether it's a quiet place for elderly residents to read, a vibrant space for children to play, or an area for family gatherings.
Engagement with nature	Nature is an essential component of intergenerational design. Incorporating green spaces, gardens, and natural elements into urban environments promotes mental health, relaxation, and physical well-being for all generations. Green spaces have been shown to reduce stress, improve cognitive functioning, and provide opportunities for physical activity, which are essential for both the elderly and children [3].

Source: By author, adapted from Stadt Wien [11], Zimmermann [12], and Gehl [3].

In modern cities, where urbanization often leads to fragmented social structures, intergenerational spaces have become a vital tool for fostering community cohesion. Public spaces that encourage interaction between different generations can strengthen social bonds, reduce age-related isolation, and promote mutual understanding between young and older generations. These spaces contribute to social sustainability, a concept that emphasizes the long-term social cohesion and quality of life of a community [16]. The design of intergenerational spaces is particularly important in addressing the needs of aging populations in many parts of the world. According to United Nations data, the global population of people aged 60 and older is expected to grow substantially over the coming decades, which will significantly impact urban

planning [20]; therefore, designing cities that cater to the needs of older adults is critical for ensuring that cities remain livable, inclusive, and supportive of all residents.

Copenhagen, Denmark, is a leader in intergenerational urban design. The city has created spaces that cater to all ages, such as intergenerational playgrounds where children, parents, and elderly residents can interact. In parks like Fælledparken, designed for both active recreation and relaxation, older adults can engage in walking groups while children play nearby. The park includes seating areas and shaded spots, encouraging social interaction across age groups. Copenhagen's commitment to active aging is also visible in the city's parks, where seniors can take part in exercise programs designed for older adults while interacting with younger generations [16].

Barcelona, Spain, has developed a comprehensive approach to intergenerational design, with its emphasis on creating neighborhood hubs that encourage different age groups to participate in community life. The city's superblocks (superilles) are designed to reduce car traffic, increase pedestrian space, and foster intergenerational interactions. These superblocks prioritize the integration of children's play areas, senior citizen zones, and green spaces, allowing for the seamless coexistence of diverse generations in shared public spaces [3].

Table 3. Key features of intergenerational design in selected cities.

City	Key features of intergenerational design
Copenhagen, Denmark	Intergenerational playgrounds and parks for children, parents, and elderly individuals. Design of walking groups and exercise areas for older adults. Creation of spaces that allow active engagement and passive relaxation.
Barcelona, Spain	Creation of superblocks (superilles) to promote pedestrian spaces and reduce traffic. Multifunctional neighborhood hubs designed for all ages. Integration of green spaces, playgrounds, and social areas.
Tokyo, Japan	Public spaces with mixed-use areas that cater to children, seniors, and working adults. Public housing and communal spaces that promote social interaction among different age groups.
New York City, USA	Urban parks are designed to be accessible and safe for seniors while promoting children's recreational activities. Creation of shared spaces for families to gather, including outdoor seating and community events.

Source: By author.

The integration of intergenerational design principles into urban spaces is essential for creating cities that cater to the needs of all residents. **Table 3**, highlights the key features of intergenerational design in 4 selected cities. By promoting inclusivity, accessibility, and social interaction between generations, cities can foster more cohesive, resilient, and sustainable communities. Urban planning that prioritizes the physical and social needs of children, adults, and the elderly will contribute to more vibrant, inclusive cities where all individuals can thrive. As urban populations continue to age and diversify, the need for intergenerational spaces will only grow, making it an essential element of future urban planning.

2.4. Hybrid public spaces in the digital age

As we progress further into the digital age, public spaces are undergoing a profound transformation. Traditionally, public spaces were defined by their physical characteristics, such as parks, plazas, streets, and squares, where people gathered to engage in social, cultural, and recreational activities. However, the rise of digital technologies, social media, and ubiquitous connectivity has given birth to a new concept in urban planning: hybrid public spaces. These spaces merge physical environments with digital technologies, creating multi-dimensional, interactive, and evolving spaces that cater to the needs of a technologically savvy population. Hybrid public spaces combine the physical and digital realms to foster deeper engagement, facilitate interaction, and enhance the experience of public spaces. They incorporate digital technologies such as Wi-Fi, interactive screens, augmented reality (AR), sensors, and social media platforms into the physical environment, transforming how individuals interact with space, each other, and the urban environment at large.

The integration of digital technologies into public spaces not only improves the functionality of these areas but also facilitates greater inclusivity and accessibility. Digital tools can help overcome physical barriers to access, providing people with disabilities or those in remote locations opportunities to engage with public life in ways that were not possible before. Hybrid spaces allow for dynamic interactions between users, local communities, and even global audiences, bridging gaps and enabling people to connect in meaningful ways. Hybrid public spaces feature several key elements that distinguish them from traditional public spaces. One of the most defining features of hybrid public spaces is their digital connectivity. High-speed internet, free Wi-Fi, and smart infrastructure are increasingly being integrated into public spaces to ensure that people can stay connected, whether for work, communication, or entertainment. Cities like Barcelona and Amsterdam have pioneered free Wi-Fi zones in public spaces, creating digital hubs that allow people to remain connected while enjoying physical spaces.

Interactive technologies are another important element. Touchscreens, digital kiosks, and AR platforms allow users to engage with public spaces in new ways. These technologies provide users with information about the space, upcoming events, and surrounding services, as well as enable them to participate in virtual tours, access local services, or play digital games in real-time. For example, Superkilen Park in Copenhagen integrates digital installations that allow users to interact with cultural elements from around the world through QR codes and smartphone apps. Smart cities leverage sensors, data analytics, and IoT (Internet of Things) devices to create responsive public spaces. These technologies can monitor environmental factors like air quality, temperature, and traffic flow, providing real-time feedback to city planners and users alike. In Singapore, the Smart Nation Initiative has integrated sensors and digital tools into public spaces to enhance mobility, monitor waste management, and promote sustainability.

Social media integration is another aspect of hybrid public spaces. These spaces are increasingly connected with social media platforms, enabling real-time sharing and interaction. Public spaces may feature digital billboards that display social media posts, encouraging users to share their experiences online and engage with others in

the city or globally. This digital element allows for crowdsourced content and increases the visibility and vibrancy of public spaces. Augmented reality (AR) and virtual reality (VR) technologies are starting to play a significant role in hybrid public spaces. These technologies enhance physical spaces by overlaying digital information or creating immersive virtual environments. Times Square in New York, for example, uses AR technology to deliver personalized, interactive experiences for visitors, from gaming to educational content. Similarly, the AR Urban Playground in Tokyo allows users to engage with 3D digital characters and games as they navigate the city.

Hybrid public spaces bring several benefits. One of the most important is increased inclusivity. Hybrid public spaces break down barriers by offering new ways for people to interact with their environment. For example, digital signage and AR technologies can provide multilingual content, allowing non-native speakers to navigate urban areas more easily. Digital tools can offer audio descriptions for visually impaired individuals, making public spaces more accessible and inclusive.

These spaces also enhance user engagement. The combination of physical and digital experiences in public spaces encourages greater interaction from visitors. Whether through interactive games, information sharing, or virtual participation, hybrid spaces foster a deeper connection to the urban environment. The ability to share experiences through social media and digital platforms also increases participation and broadens the reach of public space events and activities. Hybrid spaces also support sustainability and efficiency. The use of smart technologies promotes more efficient resource use.

For example, sensors can monitor environmental factors like lighting and temperature, adjusting them based on real-time data to conserve energy. Digital tools can also streamline services such as public transportation, waste management, and traffic control, contributing to more sustainable urban living. Hybrid public spaces improve safety. The integration of surveillance systems, sensors, and real-time data can enhance public safety in these spaces. For example, cameras and motion sensors can monitor crowded areas and alert authorities if any incidents occur, ensuring a faster response. In cities like London, digital technologies are being used to improve public safety by monitoring crime hotspots and enhancing emergency response times.

The High Line, New York City (**Figure 1**), is a repurposed elevated park that integrates both physical and digital experiences. The park features interactive digital installations that provide historical and artistic information, allowing visitors to engage with the space in new ways. The park also offers free Wi-Fi, making it easy for visitors to stay connected as they explore. The Smart Square, Barcelona, also known as the "smartest square" in Europe, is a public space that features digital signage, interactive kiosks, and free Wi-Fi. The Smart Square is equipped with sensors that monitor air quality, providing real-time environmental data to users. The square also hosts digital art installations, turning the space into a dynamic hub for both physical and virtual engagement. Another example of how hybrid spaces can combine environmental sustainability with digital technologies is CityTree, a mobile green space in Berlin.

Figure 1. High line, New York city [21].

Figure 2. CityTree, Berlin. [22].

Figure 2, CityTree is equipped with sensors that measure air quality and provide real-time data. CityTree acts as a public art installation that offers a tactile, sensory experience. It also features digital screens that display the collected data, raising awareness about pollution and environmental issues.

Hybrid public spaces represent the future of urban design, where the digital and physical realms come together to create dynamic, interactive, and inclusive environments. **Table 4**, highlights hybrid features incorporated in 4 selected cities. As cities become increasingly connected, integrating digital technologies into public spaces will play a critical role in promoting inclusivity, engagement, sustainability, and safety. These spaces allow for richer, more immersive experiences, bridging the gap between users and their environments. As technology continues to evolve, hybrid public spaces will become essential for shaping cities that are resilient, connected, and

capable of meeting the diverse needs of all residents in the digital age. The case studies of Zurich, Vienna, Luxembourg, and other cities illustrate a growing trend toward creating more inclusive, gender-responsive, and intergenerational public spaces. These cities have integrated principles of gender mainstreaming, inclusive design, and accessibility into their urban planning processes, resulting in more equitable and socially cohesive environments. The next frontier in public space design lies in creating hybrid spaces that accommodate the needs of both physical and digital interactions, ensuring that cities can adapt to the evolving demands of modern urban living. Ultimately, the integration of these elements into urban planning is crucial for fostering resilience, inclusivity, and social justice in cities around the world.

Table 4. Hybrid public spaces are key features of selected case studies.

City	Hybrid Feature
New York City, USA	Interactive digital installations providing information and historical context. Free Wi-Fi and digital signage in the High Line.
Barcelona, Spain	Digital signage and free Wi-Fi in Smart Square. Environmental sensors monitor air quality in real time.
Berlin, Germany	CityTree integrates green technology with digital sensors to monitor air quality. Digital screens providing real-time data.
London, UK	Public spaces with integrated surveillance systems and real-time data analytics for enhanced safety. Digital tools for efficient public services.

Source: By author.

2.5. Evaluating the impact of inclusive public space design

As urban planners and policymakers advance more inclusive models of public space design, the question arises: how do we know whether these interventions are working? Evaluation is not simply a matter of auditing compliance with accessibility standards; it is a vital mechanism for assessing how spaces are experienced, inhabited, and appropriated by diverse users. Post-occupancy evaluations, user satisfaction surveys, and participatory monitoring tools have become indispensable in measuring the success of inclusive design strategies. The cities of Vienna, Zurich, and Luxembourg provide instructive examples of how evaluative frameworks can yield actionable data and validate the value of inclusive urbanism.

In Vienna, the Seestadt Aspern development represents a flagship project that exemplifies gender-sensitive and inclusive planning at scale. From its inception, the design process integrated feminist planning principles, prioritizing mixed-use layouts, mobility equity, proximity between homes and services, and public spaces that accommodate varied caregiving responsibilities. Importantly, these were not one-time decisions but part of a continuous cycle of planning, feedback, and revision. Multiple post-occupancy evaluations conducted through interviews, usage surveys, and behavioral observation have demonstrated that Seestadt Aspern is more frequently used by women, families with children, and elderly residents compared to other urban areas lacking inclusive design [17,23]. These studies also revealed increases in perceived safety, social interaction, and the frequency of independent mobility for children and older adults.

Beyond usage statistics, Vienna's evaluative approach underscores the importance of qualitative insights. Focus groups revealed that women valued lighting, visibility, and seating arrangements for their impact on both physical comfort and emotional well-being. Parents emphasized the value of inclusive playgrounds co-located with shaded seating areas. These findings informed adjustments in later development phases, illustrating how post-occupancy evaluation can function as a feedback loop within an iterative design process.

In Zurich, inclusive public space design is closely tied to accessibility and mobility justice. The city has invested significantly in barrier-free infrastructure, integrating universal design elements across transit hubs, pavements, parks, and civic plazas. Evaluations here often adopt a multi-modal methodology, combining data from infrastructure audits, pedestrian counts, and interviews with users from historically excluded groups, including the elderly and people with disabilities. One such study found that usage of certain plazas increased by 40% following the addition of tactile paving, rest areas, and visual wayfinding tools. Additionally, Zurich's municipal planning department has developed a rolling evaluation mechanism: periodic audits are scheduled every five years, and design guidelines are revised in accordance with user feedback. These practices reflect a culture of evidence-based planning and ensure that public space remains adaptive to changing user needs.

Luxembourg presents another instructive case where participatory design has directly influenced both design outcomes and user satisfaction. Evaluations conducted in neighborhoods that employed participatory methods, such as co-design workshops, youth forums, and stakeholder charrettes showed not only higher community engagement but also improved perceptions of safety, ownership, and inclusivity. These findings align with broader literature emphasizing that when residents are genuinely involved in the planning and design process, they are more likely to use and maintain public spaces. In contrast, projects designed without participatory input often faced underuse, vandalism, or contestation over spatial control. Importantly, evaluations in all three cities also serve a political function: they help justify continued funding for inclusive design, support the expansion of institutional frameworks (such as Vienna's Women's Office), and offer evidence to counter opposition from interest groups skeptical of gender-sensitive or community-centered approaches.

For cities in the Global South, including those in Sub-Saharan Africa, Latin America, and South Asia, these evaluation practices offer critical lessons. First, they underscore the value of low-cost, community-based monitoring tools including participatory mapping, storytelling, and visual audits that can function in resource-constrained environments. Second, they suggest that evaluations need not wait until the end of a project; rather, phased evaluations can be built into the planning cycle to inform ongoing decision-making. Third, they provide a basis for scaling successful prototypes, allowing local governments to replicate inclusive features (e.g., safe seating for the elderly, shade for vendors, accessible paths) in different neighborhoods based on proven utility.

In South Africa, for example, the application of post-occupancy evaluation to informal settlement upgrading could yield vital insights into which design elements promote safety, usability, and social inclusion. These evaluations could be integrated into initiatives such as the Upgrading of Informal Settlements Programme (UISP) or

the National Public Transport Network Grant, enabling planners to refine spatial interventions based on actual user experience. Inclusive public space design must be measurable and accountable. Without clear indicators of impact, inclusive planning risks becoming a rhetorical device rather than a transformative practice. The experiences of Vienna, Zurich, and Luxembourg show that when inclusive interventions are evaluated rigorously and transparently, they not only improve public spaces, they shift the political and cultural norms around who has the right to the city.

3. Methodology

This study employs a qualitative research methodology based on secondary data analysis, with a focus on public space design, gender mainstreaming, and inclusivity. The research builds on previous studies that explored the intersection of urban planning and inclusivity, particularly in the context of gender-sensitive design. Secondary data was utilized to explore the evolution of inclusive public spaces and the best practices employed by cities worldwide. The methodology integrates extensive literature reviews and data from prior studies, complemented by further secondary data research to enhance the findings.

3.1. Literature review and case selection

The primary foundation of the research was laid through a comprehensive literature review. This literature review focused on identifying key global trends and best practices in the design of inclusive public spaces, especially in relation to gender mainstreaming. A variety of sources were used, including academic journals, urban planning reports, and city-specific design documents from international organizations such as UN-Habitat, UN Women, and the European Commission. This review highlighted key cities known for their inclusive public space design, with Zurich, Vienna, and Luxembourg emerging as global leaders in urban inclusivity. The case study cities were selected based on their established reputation for prioritizing accessibility, safety, and gender-sensitive urban planning in their public space designs. The city of Vienna, in particular, was chosen as the central focus for gender mainstreaming in public space design due to its internationally recognized policies that advocate for gender equality in urban planning [24,25]. The previous studies referenced were essential in laying the groundwork for this research, as they provided a solid baseline for understanding the relationships between public space design and inclusivity. The research further builds on this foundational data by incorporating secondary data from recent studies on the evolving role of public spaces in addressing gender equality and accessibility.

3.2. Secondary data collection

Since the data collected in this study is derived from previous research, the focus of the data collection was on extracting and analyzing findings from existing sources. These sources included:

1) Documents and reports from cities that have implemented inclusive urban design strategies. For example, studies on Vienna's public space interventions, such as

the creation of gender-neutral public toilets, community-focused safety measures, and inclusive seating arrangements, provided key insights into best practices.

2) Governmental publications and reports from NGOs, such as those published by the European Commission and UN-Habitat, which outlined global rankings and case studies on the inclusivity of public spaces.
3) Data from earlier studies on public space design that focused on inclusivity, accessibility, and gender mainstreaming.
4) Peer-reviewed journals, articles, and conference proceedings related to urban design, gender equality, and inclusivity in public spaces.

By utilizing secondary data from these sources, the study aimed to extract comprehensive information on the elements of public spaces that make them inclusive, with a particular focus on the needs of women, the elderly, children, and people with disabilities.

3.3. Comparative case study analysis

To synthesize the data, a comparative analysis was conducted on the public spaces in the case study cities: Zurich, Vienna, and Luxembourg. This comparative analysis highlighted how the design elements identified through secondary data research were implemented in each city and the extent to which these elements contributed to inclusivity. The comparative analysis focused on the following areas:

- The extent to which each city incorporated gender-sensitive features and spaces designed to empower marginalized groups.
- How well each city involved local communities in the design process, ensuring that diverse groups were consulted and their needs were met.
- An examination of the urban policies and regulations that supported the development of inclusive public spaces, including funding and policy frameworks for integrating gender mainstreaming.

3.4. Presentation and interpretation of results

The results of the secondary data analysis were presented through various means, including descriptive tables, graphs, and charts. These visual tools helped communicate the design elements found in each case study city, along with their effectiveness in promoting inclusivity. **Table 5** below outlines key design elements implemented in the public spaces of Zurich, Vienna, and Luxembourg and their contributions to inclusivity.

Table 5. Inclusive design features by city.

Design Element	Zurich	Vienna	Luxembourg
Gender-neutral public toilets	Yes	Yes	Yes
Safe, well-lit walkways	Yes	Yes	Yes
Accessible seating	Yes	Yes	Yes
Community engagement in design	Extensive	Extensive	Moderate
Inclusive playgrounds	Yes	Yes	Yes

Source: By author, adapted from secondary data sources and previous studies [23].

4. Reimaging public space

As cities evolve, the role of public spaces has undergone significant transformation. No longer merely recreational or aesthetic domains, public spaces are increasingly recognized as essential infrastructures for democratic participation, social inclusion, and urban resilience. In rapidly urbanizing contexts, particularly within the Global South, public spaces serve as critical lifelines for informal economies, social services, and community-based networks. This reframing calls for an approach that goes beyond aesthetic and technical considerations to encompass a deeper understanding of public space as a site of social justice and spatial equity.

Reimagining public space requires challenging historically exclusive urban design norms. Many traditional public spaces have been developed with a narrow focus, often privileging able-bodied, male, and economically stable users while marginalizing the needs of women, children, people with disabilities, the elderly, and the urban poor. In low-income and informally developed areas, this exclusion is compounded by a lack of basic services, underinvestment, and insecure tenure. As urban populations diversify and densify, inclusive public space design must become more context-sensitive, ensuring accessibility, safety, and usability across all socio-economic and demographic groups. Crucially, scalable interventions such as *tactical urbanism* and *community co-design* offer promising models for the Global South. Tactical urbanism involves low-cost, temporary changes to the built environment, such as pop-up parks, street painting, and mobile seating, that can test inclusive design concepts before formal adoption. These interventions democratize the design process and allow for iterative, user-driven modifications, often engaging youth and marginalized communities in the transformation of their own neighborhoods [26]. Community co-design goes a step further by embedding residents as equal partners in the design process. This approach has been particularly effective in informal settlement contexts, where spatial interventions must align with lived realities, social networks, and resource constraints.

Case studies from Vienna, Zurich, and Luxembourg provide valuable insights into how inclusive design principles can be institutionalized. These cities have invested in long-term participatory frameworks, inclusive policy mandates, and adaptive infrastructure that supports safe, accessible, and dignified use of public space by all. However, in translating these lessons to low-income contexts, such models must be recalibrated for affordability and scalability. Informal settlement upgrading initiatives, such as those seen in Latin America and parts of Sub-Saharan Africa, demonstrate that integrating public space improvements such as lighting, pathways, sanitation, and communal gathering spaces into slum rehabilitation is both achievable and transformative. These precedents show that inclusive public space is not a luxury for the affluent but a foundational element of equitable urban development. Digital transformation is also reshaping public space. The rise of hybrid environments that blend digital and physical components presents opportunities to bridge access gaps, especially for youth and tech-literate populations. While advanced smart infrastructure may be financially prohibitive for low-income cities, cost-effective digital tools such as mobile platforms for public feedback, SMS-based service requests, or community mapping can foster transparency and participation. These solutions must, however, be

designed with attention to digital divides, ensuring that age, literacy, and affordability do not become new forms of exclusion. Reimagining public space in the Global South requires a holistic and flexible design approach, one that values inclusion, embraces local knowledge, and leverages partnerships to co-create public environments that are responsive, dignified, and empowering for all.

5. Building for inclusion

As cities around the world continue to grow, the need for inclusive public spaces has never been more urgent. Urban populations are becoming increasingly diverse, with people from different backgrounds, ages, physical abilities, and socioeconomic statuses interacting in shared public spaces. For public spaces to serve the needs of everyone, it is not enough to simply make them available; they must be designed to foster inclusivity, ensure safety, and support the well-being of all users. This is especially true in the context of gender, disability, age, and cultural inclusivity, which requires public space designs that transcend traditional, one-size-fits-all solutions. Designing spaces that accommodate these diverse needs means thinking not only about accessibility but also about how public spaces can function as catalysts for social cohesion and sustainable urban development.

Public spaces have long been recognized as essential to the social fabric of cities. They serve as venues for social interaction, relaxation, recreation, and cultural exchange. However, these spaces are also crucial for social inclusion, ensuring that every individual, regardless of their gender, age, or physical ability, can access and fully participate in the life of the city. As urban spaces evolve, there is an increasing recognition that inclusive public spaces are not just a matter of good design; they are critical to the creation of equitable, resilient cities.

A fundamental principle of inclusive public space design is accessibility. To meet the needs of all users, cities must provide spaces that are accessible to people with varying physical abilities, including those who use wheelchairs, the elderly, and parents with strollers. Accessibility is not simply about meeting minimal regulatory standards but rather about ensuring that every individual can experience public spaces on equal terms. Cities like Zurich have set a high standard in making public spaces fully accessible to people with disabilities. Accessible transport networks, including buses, trams, and trains, are integral to ensuring that individuals with mobility challenges can navigate the city. Public parks, public restrooms, and street furniture are all designed with accessibility in mind, such as wheelchair-friendly pathways, seating arrangements that accommodate a variety of body types, and tactile pavings to guide individuals with visual impairments [27]. These design features reflect the city's commitment to universal accessibility and provide valuable lessons for cities worldwide looking to improve their public space inclusivity. Zurich's approach, as presented in **Table 6**, goes beyond compliance with basic accessibility requirements to embrace an ethos of universal design that is reflected in all aspects of urban planning.

Table 6. Zurich's inclusive approach.

Design Element	
Accessible transport networks	Accessible buses, trams, and trains for all users, including those with disabilities.
Universal public restrooms	Gender-neutral and fully accessible facilities across public spaces.
Open and safe walkways	Curb cuts, ramps, and tactile paving throughout the city to assist individuals with mobility challenges.

Source: Adapted from Stadt Zürich [18].

Safety is a critical concern for the design of public spaces, particularly for women and marginalized groups who often face the threat of violence and harassment. A lack of safety in public spaces leads to their underutilization, negatively impacting not only individuals' sense of well-being but also broader social and economic outcomes for entire communities. Designing public spaces that are safe and accessible to everyone, regardless of gender or background, is essential to their success. Gender-responsive design, a concept pioneered in cities like Vienna, involves integrating features that address the unique safety concerns of women. Research has shown that public spaces designed with input from women are safer and more inviting for everyone. Vienna, for example, incorporates elements such as well-lit parks, pedestrian-friendly streets, and a public transport system designed with safety in mind. These measures help reduce the risk of harassment, creating spaces where people feel comfortable and empowered to interact freely. **Table 7**, highlights Vienna's gender responsive design elements. Vienna's focus on including facilities such as childcare centers in public spaces fosters a more inclusive environment for families and caregivers [24]. When cities create public spaces that are designed with an awareness of the safety and security concerns of women and marginalized groups, they not only improve physical safety but also encourage broader social participation.

Table 7. Vienna's gender responsive approach.

Design Element	
Enhanced lighting	Streetlights and park lighting are designed to increase safety and visibility at night.
Community consultation	Including women and marginalized groups in the planning process to address their specific concerns.
Childcare facilities	Integrating family-friendly spaces, such as free public day care in parks and plazas.

Source: UN Women [22].

Public spaces must not only be inclusive but also resilient. As climate change and other global challenges increasingly affect urban environments, cities must design public spaces that can adapt to new and unexpected conditions. This includes integrating sustainable solutions, such as green infrastructure and flexible urban spaces, which can serve multiple functions over time. Cities like Luxembourg have embraced the concept of resilience through innovative public space design. Green infrastructure, such as permeable pavements, green roofs, and urban forests, helps manage stormwater and mitigate the urban heat island effect. Luxembourg has prioritized multifunctionality in its public spaces, ensuring that parks, plazas, and

streets can accommodate a variety of activities, from markets to cultural events. **Table 8** highlights Luxembourg's design elements implemented for adaptability in the city. These spaces are not only designed to be resilient to environmental shocks but also to adapt to the changing needs of the community, making them more valuable over time [28].

Designing with resilience in mind ensures that public spaces can thrive even in the face of future uncertainties, offering long-term benefits to both the environment and the people who use them.

Table 8. Luxembourg's adaptability features.

Design Element	
Green infrastructure	Permeable pavements, green roofs, and urban forests to manage water and mitigate heat.
Multifunctional spaces	Flexible spaces that can accommodate different types of events, from cultural festivals to emergency shelters.
Smart city integration	Incorporating technology like sensors to monitor environmental conditions in real time.

Source: Luxembourg city council [26].

Sustainability is central to the future of public space design. As cities continue to grow, there is an urgent need to rethink how public spaces interact with the environment. Sustainable public spaces are those that not only reduce their ecological impact but also provide lasting benefits to the urban ecosystem and the communities that use them. Green spaces, urban gardens, and eco-friendly infrastructure can all play key roles in improving sustainability. In Vienna, public spaces are designed with environmental stewardship in mind. The integration of green roofs on public buildings, renewable energy systems for street lighting, and urban farming initiatives within parks and public spaces contribute to the city's sustainable development goals. These initiatives not only reduce the environmental impact of urban areas but also promote community engagement, as residents actively participate in maintaining and enjoying these spaces [29]. As cities continue to tackle the challenges of climate change, sustainable public space design will become even more critical in ensuring that urban environments remain livable for future generations.

The future of public space design lies in its ability to evolve with the changing needs of society. The lessons learned from cities like Zurich, Vienna, and Luxembourg can serve as models for cities around the world, showcasing how inclusivity, safety, adaptability, and sustainability can be integrated into the fabric of urban life. As cities face new challenges, from demographic shifts to environmental crises, public spaces must be engineered to be more than just functional. They must be places of engagement, resilience, and connection for all. To build truly inclusive and resilient cities, urban planners must embrace the potential of public spaces as dynamic environments that respond to the diverse and evolving needs of the population. By adopting inclusive design principles, creating safe and responsive spaces, and integrating sustainable practices, cities can create public spaces that serve as the foundation for a more equitable, resilient, and vibrant future.

6. Policy and practice recommendations

The future of inclusive public space depends not only on progressive design innovations but also on the strategic alignment of policy, governance, and resource mobilization. Cities that have successfully created inclusive and accessible public spaces such as Vienna, Zurich, and Luxembourg demonstrate that sustainable change is rooted in institutional commitment and cross-sector collaboration. These cities embed inclusion at every stage of spatial planning, supported by regulatory mandates, dedicated funding, and participatory governance structures [23,30].

Vienna's success in gender mainstreaming, for instance, stems from its longstanding commitment to institutionalizing inclusivity. The Women's Office, active since 1991, plays a central role in evaluating urban development proposals through a gendered lens and funding pilot projects that address the spatial needs of women, the elderly, and families [17]. Luxembourg has similarly embedded equity through mandated public consultations and inclusive planning codes that prioritize social cohesion and accessibility in redevelopment projects [19]. Zurich's investment in universal accessibility from tactile paving to comprehensive signage, demonstrates how infrastructure can support a wide range of abilities and foster dignity in shared spaces. However, applying these models in low-income cities, especially across the Global South, requires adaptive, context-aware strategies. Many such cities operate under tight fiscal constraints, fragmented governance, and high levels of informality. In these settings, large-scale, top-down projects may be unfeasible. Instead, more feasible pathways include:

- Tactical urbanism: Municipalities can initiate low-cost, rapid interventions to test inclusive design features, such as pedestrian zones, pop-up play areas, or mobile health kiosks before formalizing them. These pilots can be co-managed with local stakeholders to build trust and ownership.
- Community co-design: Public space projects should embed participatory design processes that involve informal residents, women's groups, youth networks, and disabled persons' organizations. This not only ensures that design aligns with local needs but also fosters long-term stewardship of space.
- Public-private partnerships (PPPs): Governments can leverage private sector resources particularly in housing, retail, and transport sectors to co-fund and maintain inclusive public spaces. PPPs must be structured with clear social outcome indicators to avoid elite capture or commercial overreach.
- Participatory slum upgrading: Evidence from countries such as Colombia, Brazil, and Kenya shows that upgrading informal settlements with integrated public space components, like lighting, sanitation, and green corridors, not only improves living conditions but also enhances safety, mobility, and social cohesion.

In the South African context, existing frameworks such as the Integrated Urban Development Framework (IUDF) and the National Spatial Development Framework (NSDF) provide a policy foundation for inclusive public space planning. However, implementation challenges including bureaucratic inertia, elite capture, and funding gaps, have hindered progress [29]. Bridging the policy-practice divide will require greater interdepartmental coordination, community engagement, and investment in

local capacity-building. Crucially, inclusive public space provision should be recognized as an investment in social infrastructure, not a discretionary urban amenity. It supports safety, health, economic participation, and environmental resilience, all of which are foundational to sustainable urban futures. By adapting global lessons to local realities and foregrounding participatory governance, low-income cities can chart practical and just pathways toward inclusive public space for all.

Table 9 provides a comparative snapshot of selected inclusive public space policies across three high-performing global cities and South Africa.

Table 9. Comparing international and South African public space policies.

Policy Ares	Zurich	Vienna	Luxembourg	South Africa
Gender mainstreaming in urban planning	Integrated into public health and mobility planning	Legal mandate; applied city-wide; monitored by Women's Office	Participatory planning with a focus on social equity	The National Gender Policy exists but lacks enforcement in planning
Participation in the design process	Participatory budgeting and civic forums	Community co-design in all major projects	Mandatory citizen assemblies for all major redevelopments	Encouraged in policy (IUDF), but limited in practice
Legal frameworks for inclusion	Federal law supports social cohesion via urban design	Municipal laws enforce inclusive design	National development plans embed inclusive city principles	Fragmented frameworks; inclusion not legally binding
Public transport and accessibility	High-frequency, fully accessible transit systems	90%+ of residents within walking distance of inclusive transit	Subsidized, accessible public transport options	Inequitable access; poor infrastructure in townships

Source: By author, adapted from UN-Habitat [28], Hunt [21], Luxembourg Planning Ministry [19], and COGTA [29].

While South African planning discourse acknowledges the importance of inclusive cities, implementation is hindered by systemic barriers. These include institutional silos, budget constraints, and limited professional capacity in municipalities. Gender mainstreaming, though recognized in policy, has not yet been translated into operational frameworks at the local level, nor does it influence the daily practice of urban planning to the extent seen in Vienna or Zurich. However, promising initiatives are emerging. Cities like Cape Town and Durban have begun experimenting with participatory public space design in informal settlements and central urban areas. Programs such as the Violence Prevention through Urban Upgrading (VPUU) show the transformative potential of intersectoral collaboration when planning is rooted in community needs and spatial justice [31].

7. Conclusion

Public space is more than just the backdrop of urban life; it is where the values of a society are made visible and tangible. In reimagining these spaces for a more inclusive future, this article has unpacked how design, policy, technology, and lived experience intersect in shaping cities that are not only functional but fundamentally just. This research journey began with a recognition of the deep-rooted inequalities that continue to pervade spatial planning, particularly in post-colonial and post-apartheid contexts, and it explored how alternative frameworks grounded in care, inclusivity, and participation can offer meaningful responses.

The comparative analysis of global case studies, especially from Zurich, Vienna, and Luxembourg, has provided not only inspiration but also concrete evidence that inclusion is an achievable urban goal when supported by intentional governance and a people-centered design ethos. Vienna's gender mainstreaming, Zurich's participatory governance, and Luxembourg's spatial equity strategies illustrate how public spaces can be engineered to serve everyone across age, gender, mobility, and socio-economic divides [17,19,28]. In contrast, South Africa's urban experience tells a story of resilience in the face of persistent inequality. Despite advanced policy frameworks such as SPLUMA and the IUDF, the realization of inclusive public spaces remains uneven and underfunded [32]. This article argued that one of the greatest missed opportunities in urban development lies in treating inclusion as an optional add-on rather than as the foundation of resilient and sustainable settlement planning. Through data drawn from previous studies and secondary sources, this paper built a case for rethinking how we design for women, children, the elderly, and persons with disabilities, not as marginal figures, but as central to the success of urban public life.

The rise of hybrid digital-physical public spaces adds an entirely new dimension to inclusion, bringing forth questions around access, digital literacy, and intergenerational connectivity. While these evolving spaces hold enormous potential, they also risk replicating existing inequalities if not designed with equity in mind [33]. This moment, therefore, presents both a challenge and an opportunity: to use the tools of design, planning, and policy to build not just cities, but futures. As we look ahead, the work of inclusion must be approached not as a static goal but as an ongoing, dynamic process. Cities must engage communities as co-creators, dismantle spatial legacies of exclusion, and center planning processes on human dignity. Engineering inclusive public spaces is ultimately about more than just access; it is about belonging. By reflecting on international best practices while grounding the discussion in local realities, this article contributes to a growing body of scholarship and practice that insists on cities being not only smart or sustainable, but just, caring, and inclusive. The task before planners, policymakers, architects, and citizens is to ensure that the next generation of public spaces are places where everyone sees themselves not just accommodated, but truly valued.

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References

1. Rendell J, Penner B, Borden I, editors. Gender, space, architecture: an interdisciplinary introduction. London: Routledge; 2000.
2. Rampaul K. Examining the Concept of Gender Mainstreaming in Urban Space to Promote Inclusive Cities: The Case of Warwick Market, Durban, South Africa [Master's thesis]. University of KwaZulu-Natal; 2021.
3. Gehl J. Public space and public life under lockdown [Internet]. Copenhagen: Gehl Architects; 2020. Available online: https://covid19.gehlpeople.com/lockdown (accessed on 2 April 2025).
4. Beebeejaun Y. Gender, urban space, and the right to everyday life. J Urban Aff. 2016; 39(3): 323–34. doi: 10.1080/07352166.2016.1255526

5. Whitzman C, Legacy C, Andrew C, et al. Building Inclusive Cities: Women's Safety and the Right to the City. Routledge; 2013.
6. Fainstein SS, Servon LJ. Gender and Planning: A Reader. Rutgers University Press; 2005.
7. Lynch K. The Image of the City. MIT Press; 1960.
8. Honey-Rosés J, Anguelovski I, Chireh VK, et al. The impact of COVID-19 on public space: An early review of the emerging questions—design, perceptions and inequities. Cities and Health. 2020; 5(sup1): S263–S279. doi: 10.1080/23748834.2020.1780074
9. Zukin S. The Innovation Complex: Cities, Tech, and the New Economy. Oxford University Press; 2021.
10. Hanson S, Pratt G. Gender, Work, and Space. London: Routledge; 1995.
11. Stadt Wien. Manual for Gender Mainstreaming in Urban Planning and Urban Development. Vienna: City of Vienna;2013. Available online: https://www.wien.gv.at/stadtentwicklung/studien/pdf/b008358.pdf. (accessed on 1 April 2025).
12. Zimmermann M. Gendered urban spaces: Vienna's commitment to safety and accessibility. J Urban Plann Dev. 2016; 142(4): 04016012. doi: 10.1061/(ASCE)UP.1943-5444.0000310
13. Dyménˊ C, Ceccato V. An international perspective of the gender dimension in planning for urban safety. In: Ceccato V, editor. Urban Crime Prevention and Security Management. Springer; 2015. p. 319–340
14. Perić A, Jiang Y, Menz S, Ricci L. Green Cities: Utopia or Reality? Evidence from Zurich, Switzerland. Sustainability. 2023; 15(15): 12079. doi: 10.3390/su151512079.
15. Weedy S. Luxembourg City – a model of accessibility. Child in the City. 2021 Dec 24. Available online: https://www.childinthecity.org/2021/12/24/luxembourg-city-a-model-of-accessibility/?gdpr=accept (accessed on 3 April 2025).
16. Simpson D. The Intergenerational City. Danish Portal for Artistic and Scientific Research; 2016. Available online: https://adk.elsevierpure.com/en/projects/the-intergenerational-city. (accessed on 2 April 2025).
17. Irschik E, Kail E. Vienna: Progress towards a Fair Shared City. In: Sánchez de Madariaga I, Roberts M, editors. Fair Shared Cities: The Impact of Gender Planning in Europe. London: Ashgate; 2013. p. 292–329.
18. Stadt Zürich. Grünraumstrategie 2019–2029: Grünräume für alle – für eine inklusive Stadt. Zürich: Grün Stadt Zürich; 2019. Available online: https://www.stadt-zuerich.ch/gud/de/index/ueber_uns/strategie/gruenraumstrategie.html. (accessed on 31 March 2025).
19. Luxembourg Ministry of Sustainable Development and Infrastructure. National Energy and Climate Plan (NECP) 2021–2030. Luxembourg: Ministry of Sustainable Development and Infrastructure; 2020. Available online: https://environnement.public.lu/dam-assets/documents/energie-climat/plan-energie-climat/NECP_Luxembourg_2021-2030.pdf. (accessed on 1 April 2025).
20. United Nations. World Population Prospects 2024: Summary of Results. New York: United Nations; 2024. Available online: https://population.un.org/wpp/assets/Files/WPP2024_Summary-of-Results.pdf. (accessed on 28 March 2025).
21. Highline. Highline Network. 2025. Available online: https://www.thehighline.org/photos/high-line-network/projects/?gallery=4944&media_item=%20%202736 (accessed on 28 March 2025).
22. UrbanNext. CityTree: a pollution absorbing innovation with the power of 275 trees. Available online: https://urbannext.net/citytree/. (accessed on 28 March 2025).
23. Hunt E. City with a female face: how modern Vienna was shaped by women. The Guardian. 2019 May 14. Available online: https://www.theguardian.com/cities/2019/may/14/city-with-a-female-face-how-modern-vienna-was-shaped-by-women. (accessed on 2 April 2025).
24. UN Women. Safe Cities and Safe Public Spaces: Global Results Report. New York: UN Women; 2017. Available online: https://www.unwomen.org/en/digital-library/publications/2017/10/safe-cities-and-safe-public-spaces-global-results-report (accessed on 2 April 2025).
25. European Commission. Gender Equal Cities. URBACT; 2019. Available online: https://urbact.eu/sites/default/files/2023-01/Gender%20Equal%20Cities%20Report%202019.pdf (accessed on 31 March 2025)
26. Lydon M, Garcia A. Tactical Urbanism: Short-Term Action for Long-Term Change. Washington, DC: Island Press; 2015.
27. Zürich Tourismus. Barrier-Free Zurich: Travel Information. Zürich: Zürich Tourismus; 2023. Available online: https://www.zuerich.com/en/inform-plan/getting-there-and-mobility-on-location/zurich-sans-barrieres (accessed on 28 March 2025).

28. Luxembourg City Council. Municipal Council Meeting Minutes – 18 November 2019. Ville de Luxembourg; 2019. Available online: https://www.vdl.lu/en/city/political-life/municipal-council/seances-du-conseil-communal/archives/meeting-municipal-council-18-november-2019 (accessed on 1 April 2025).
29. Stadt Wien. Smart City Wien Framework Strategy 2019–2050. Vienna: City of Vienna; 2019. Available online: https://smartcity.wien.gv.at/site/en/framework-strategy/ (accessed on 2 April 2025).
30. UN-Habitat. Strategic Plan 2020–2023. Nairobi: United Nations Human Settlements Programme; 2019. Available online: https://unhabitat.org/sites/default/files/documents/2019-09/strategic_plan_2020-2023.pdf (accessed on 2 April 2025).
31. Department of Cooperative Governance and Traditional Affairs (CoGTA). Integrated Urban Development Framework (IUDF). Pretoria: CoGTA; 2016. Available online: https://www.cogta.gov.za/cgta_2016/wp-content/uploads/2016/06/The-Intergrated-Urban-Development-FrameworkIUDF.pdf (accessed on 29 March 2025).
32. Matzopoulos R, et al. Urban upgrading and levels of interpersonal violence in Cape Town, South Africa: The violence prevention through urban upgrading programme. Social Science & Medicine. 2020; 255: 112978. doi: 10.1016/j.socscimed.2020.112978
33. Gehl J. Life Between Buildings: Using Public Space. 2nd ed. Island Press; 2011.