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# Editorial: Building equity through smarter, more resilient cities of the future. Celebrating International Women's Day

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#### Editorial on the Research Topic

Building equity through smarter, more resilient cities of the future. Celebrating International Women's Day

International Women's Day, celebrated on 8 March, honors the achievements of women throughout history. Equally as important, this is a day to raise awareness of the ongoing inequalities that women across the globe still face. Every year on 8 March, we have the opportunity to acknowledge that cities have historically not been designed with women in mind. This has created not only unsafe areas, but also made it harder for women to physically move and live in cities that were mostly built for able-bodied, adult men. This opens up the floor for discussion about the importance of using women's perspectives and experiences in building smarter, more resilient cities for the future.

It is estimated that by 2050, 7 in 10 people will live in cities; currently, however, "the price women pay for living in cities includes unequal opportunities, unpaid labor, violence, poverty, unequal amounts of unpaid care work, limited job opportunities, and lack of power in both public and private decision making" (UNDP, 2022). Gender intersects with race, class, and ethnicity to further exacerbate these issues, impacting women's rights and creating multiple forms of oppression and exclusion for women.

This editorial compiles the articles included in the Research Topic of the journal Frontiers in Sustainable Cities celebrating International Women's Day, with the title *Building Equity through smarter, more resilient cities of the future.* It aims to address the social inclusion-specific dimensions of city building, highlighting the importance of specific infrastructure development that addresses care tasks and considers how to build resilient future cities that serve everyone, irrespective of gender, age, disability, or ethnicity, providing equitable urban living conditions.

The ebook for this Research Topic is divided into three sections. The first section contains three articles examining various dimensions of the role of women as architects. The second section looks at women's realities, needs, and aspirations regarding cities and territories, with a focus on mobility, transportation, and climate change. The contributions in this section explore experiences in the United States, Scandinavia, and several developing countries. The third section contains two articles that address how planning and public policy can become more responsive to women's needs, focusing on the specific areas of housing and care facilities, sometimes referred to as care infrastructure, in Latin America and Spain.

In their article *I* am an architect, Gender and Professional Identity in Architecture, MacMagnus and O'Donnell provide ample empirical evidence from Ireland demonstrating the multifaceted, contradictory, and sometimes paradoxical experiences that women face as architects. The authors argue that the confluence of gender and professional identity continues to be unresolved for women architects. This is so even after over a century of their admission into architectural education, their increasing participation in the profession, and the relevance of current debates on related issues, such as those regarding feminist, gender, or women-specific forms of architectural practices and identities.

The authors reach this conclusion after analyzing the 2023 Irish Architecture Career Tracker Survey, which received over 680 completed online questionnaires from respondents ranging in age from 20 to 72, with a follow-up of 23 semi-structured interviews. Their research examines the interplay between the gender and professional identities of those working within and outside of architectural professional practice in Ireland. The analysis of this rich empirical material shows how "women architects have to negotiate a paradoxical project: they are relatively recent entrants into a male-dominated profession which, in common with many professions has defined excellence in masculinist terms, and they must resist those discourses while articulating a vision that both values their gendered lives, yet can fit in with the profession which routinely designs for general publics" [SIC].

Along similar lines, the study by Rodríguez-Leudo and Navarro Astor takes a closer look at women's lives as architects by considering the functioning of architectural offices, and more specifically, gender differences in the perception and levels of workplace happiness. This article relies on qualitative and quantitative data from a sample of 200 workers in 60 architectural firms in Valencia, Spain. Despite an overall positive perception of happiness in the workplace, significant gender differences were found.

While recognition, appreciation, feeling valued, and achievement, all factors pointing to career development, are the main drivers of men's workplace happiness, for women, the source of happiness comes mostly from the work environment, their colleagues, and their team. In addition, women experience negative emotions such as anxiety, anger, or sadness more frequently than men. These results point to persistent gender differences between women and men. Ensuring that business actions aim at improving the quality of life and human development for all, while making work life increasingly meaningful, is still a challenge for architectural firms that requires close attention to gender considerations.

The final article in this section looks at women in architecture from a biographical standpoint with an article on the early work of architect, musician, activist, educator, and researcher Anna Bofill during the period from 1977 to 1996. Gutiérrez-Mozo et al. presented Bofill's early contributions to feminist thinking in architecture, within the context of the vast and plural production of a singular, cosmopolitan, and politically engaged personality. Bofill is best known as a composer, the field in which she has been most productive over time, while her work as an architect did not receive recognition until recently, exemplifying

the barriers and discrimination faced by pioneering women in architecture.

Bofill joined the Taller de Arquitectura in 1964, while she was still a student at the School of Architecture in Barcelona, from which she graduated in 1972. In 1981, she started an independent career, leading her own office for two decades, during a time in which solo practice was practically non-existent for Spanish women architects, although her first solo works date from 1977. Her work at the head of her office shows rather uncommon traits, much against the spirit of the time: a fundamental commitment to people's welfare; a focus on the spatial implications of women's lives in cities and towns, and hence on how urban planning and design can provide housing, transportation, public spaces, facilities, and employment spaces that are better suited to their specific needs and desires; a significant body of written work, extending over several fields, including most notably her reflections on gender issues in urban planning; and the implementation of participatory processes in her project designs.

The second section of the ebook for this Research Topic examines women's lives in the city and argues that planning should take their unique needs and preferences into consideration. The first article in this section examines the *mobility of care* in Washington, DC. Passman et al. critically analyze how infrastructure regularly supports male pursuits more than women's, focusing on gender inequity by quantifying daily trips for everyday care provision, termed the *mobility of care* following Sánchez de Madariaga's work. The authors analyze gendered travel behavior in the National Capital Region of the United States, including Washington, DC, using data from the 2017/2018 Regional Travel Survey conducted by the National Capital Region Transportation Planning Board.

This survey includes records from approximately 16,000 households and 19,274 individuals who took 49,215 trips, the majority of which were made using local buses and subways. The researchers recoded the purpose data of each trip into five broad categories (care, work, shopping, leisure, school, and all other purposes) with the following results: trips for work represented the majority of trips (34.7%), followed by shopping (28.2%), care (22.3%), leisure (8.5%), other (4.1%), and school trips (2.3%). Women were found to take more care-related trips than men (25.1% vs. 18.8%). They also took fewer work-related trips than men (30.3% vs. 40.2%).

Regression analyses revealed correlations between care-related travel by all modes and public transportation use by age, ethnicity, location of residence, and income. The mobility of care is one of the primary reasons people travel in and around the Washington, DC region. However, the bus and subway systems are primarily designed to support the mobility of work, which is mostly done by men. This study demonstrates the need for improvements in gender-responsive infrastructure, including public transportation policies and programs that explicitly address the mobility of care.

Lindkvist offers a complementary viewpoint on gender and transportation by looking at women's lived experiences of using public transport for everyday mobility, in her article *Gendered mobility strategies and challenges to sustainable travel -patriarchal norms controlling women's everyday transportation.* Using a feminist perspective based on gender system theory, in combination with

time geography and mobility strategies, she analyzes qualitative data from two national surveys, the Travel Survey and the Time Use Survey, which provide data on women living in peripheral urban neighborhoods in Sweden's three metropolitan regions.

The interviews explored mobility practices and strategies, along with experiences with different modes of transport, including their reliability, affordability, and comfort. Her analysis shows that travel choices are affected by women's concerns about safety and related adaptations to situations identified as threatening, that women are the main carers, and that they are responsible for the majority of the escorting trips of family members who cannot move independently in the city.

This study demonstrates persistent gender differences in transportation, with women's movement still limited by patriarchal socio-cultural structures, even in Sweden, a country recognized for being a forerunner when it comes to gender equality. Despite policies addressing discrimination, Swedish women still fear traveling by public transport and going out at night, pointing to the persistence of gendered social norms.

In her study, Listen, Talk, Repeat: Women's Journey Through Architecture and Environmental Consciousness, Papadopoulou further explores how women's connection to everyday life and domesticity has the capacity to inform the design of built spaces in ways that are socially inclusive, while mitigating the degradation of the built environment. Acknowledging that the design of form and space is founded on uneven relationships of power, this article aims to elucidate how harnessing these power differences can help deliver a more sustainable built environment. Drawing on feminist methodologies based on a degree of subjectivity that derives from the social constructs of everyday life and domesticity, it uses a practical approach embodied in the three-step process of "listen, talk, repeat" to frame a discourse on gender differences in the built space, societal systems, communities, and their members.

Papadopoulou illustrates with examples how these three steps have been evoked by women of diverse backgrounds to navigate and thrive in their everyday lives, and concluded that "deployment of this three-step mindset enables designers of all gender identities to mediate between theoretical space and practical applications, and to reposition socioecological sustainability as a fundamental aspect in salvaging a planet ravaged by extractivism and human ambition." Understanding how women have identified with this operational perspective reveals a rich tapestry of ideas, further organized by collective movements such as ecofeminism and the drive for resilience and sustainability.

Another contribution further addresses ecological issues and provides a bridge to the next section by advancing policy recommendations and examining the impacts of the climate crisis on gender inequality. Authored by Castelo et al., it aims to identify priorities for gender-responsive climate policy based on the recognition that the climate crisis disproportionately impacts women and girls worldwide. Geographically, the article looks at South Asia, focusing on Bangladesh, India, and Pakistan, three countries that are highly vulnerable to climate change and that are characterized by having strong patriarchal values. Gender norms in the region heighten women's and

girls' vulnerability to the impacts of climate change, both generally and in situations of crisis resulting from extreme weather events.

This study provides a review of an extensive body of literature, including specialised books, scientific articles, recent institutional reports, and news and journalistic reports from reliable international press, which provide scientific data to support the integration of a gender perspective into urban adaptation standard practices and policy priorities to safeguard women and girls. The study argues that deepening the understanding of the climate crisis' impact on gender in South Asia, a region at the forefront of these effects, can assist in reaching a baseline understanding of the challenge from a global perspective. It further argues that climate action and urban development cannot be considered separately from women's rights. Among the suggested policy strategies, the article proposes the allocation of half of climate funds, including loss and damage funds, directly to women or women-led organizations.

The last section of the ebook for this Research Topic contains two articles addressing policymaking. The first one by Novella Abril examines gender mainstreaming in the housing sector using the experience of the Region of Valencia in Spain as a case study. As a relatively advanced case of gender mainstreaming, Valencia's experience illustrates the complexity of the processes, some possible stages to take into account, and the diversity of initiatives and actions that can be implemented. The Valencia case is of particular interest because it exemplifies a comprehensive approach to gender mainstreaming in housing policies, which facilitated the development of initiatives aimed at addressing both socioeconomic and spatial gender-based inequalities.

Novella Abril demonstrates the importance of political support, favorable regulatory frameworks, and the contribution of expert knowledge, as evidenced by the experience of collaborations between the Generalitat Valenciana and the UNESCO Chair on Gender at the Universidad Politécnica de Madrid. Important elements of gender mainstreaming were the development of various regulations, including mandatory technical standards for residential building design, and pilot demonstrative projects that show how gender design criteria can be put into actual practice. The Valencia case also illuminates the difficulties inherent in gender mainstreaming efforts within any field of public policy.

The final contribution to the ebook of this Research Topic provides an overview of the state of the art in gender mainstreaming in city planning by analyzing recent policy efforts in Latin America that aim to rethink, prioritize, and support the way care tasks can be performed in urban and rural environments, in order to contribute to reducing inequality in cities and territories. Recognizing Latin America as the most unequal region in the world, authors De Madariaga and Machado argue that in order to achieve this, gender mainstreaming must come to the forefront in urban policies, at all stages of the policy cycle: from planning, regulation, and legislation, to design, construction, and management of cities and the services they provide.

The normative idea of a "city of care" overcomes traditional visions of urban realities, which are based on the dichotomy



FIGURE 1
Artwork and Photo by Anne Le Maignan. A Crochet Intervention in a Wall, at the Metro, Madrid. With permission.

between the productive and reproductive spheres, by appropriately supporting care work, which is essential for sustaining life and the economy. Gender mainstreaming in urban policies aims at shaping cities so that their physical, social, economic, cultural, and power dimensions contribute to facilitating the realization of care work.

Analyzing how recent efforts are being made to frame care as a right and emphasizing the importance of gender mainstreaming in urban planning to achieve urban transformations that support care work, this final chapter identifies the numerous policy and legal instruments developed throughout the continent, mostly since the pandemic, that aim to create conditions for building "care systems." It showcases three experiences from Latin America, two in Mexico City (UTOPÍAS and PILARES) and one in Bogotá (Manzanas del Cuidado), which have set out to advance access to rights in Latin America, including the right to care.

The Research Topic, and the resulting ebook, is part of and builds on a broader intellectual project by the editors that has already materialized in several edited books and special issues addressing gender and planning. The book *Fair Shared Cities*. The Impact of Gender Planning in Europe, co-edited by Sánchez

de Madariaga and Roberts in 2013, provided the first panoramic analysis of the state of the art of both research and practice on gender in planning on the European continent. This book brought together for the first time key experiences and contributions from across the continent, spanning a period of approximately 30 years. This book was nicely complemented by a second book, *Gendered Approaches to Spatial Development in Europe –Perspectives, Similarities and Differences*, co-edited by Zibell, Damyanovic, and Sturm.

A third collection *Engendering Cities*: *Designing Sustainable Urban Spaces for All*, co-edited by Sánchez de Madariaga and Neuman in 2020, broadened the scope to provide an overview of practice and research worldwide, while a Research Topic of the Spanish journal *Ciudad y Territorio*, also of 2020, narrowed the focus to look at the emerging Spanish experience, which is currently leading the way on innovation on gender mainstreaming in the urban planning field.

The present Research Topic contributes to these efforts by putting together a selection of contributions from around the world that combine original research with policy and practice analysis. The combined array of topics and methodologies is representative of the richness, depth, and width of the conceptual approaches

and viewpoints that today inform this new academic research area, demonstrating that gender and planning is becoming a ripe area of research and practice around the world. The contributions to this Research Topic also demonstrate the persistence of gender inequalities in cities worldwide, which demands the consolidation and expansion of a gendered outlook on city building. Artwork by Anne Le Maignan reproduced in Figure 1 metaphorically suggests the posssibilities for urban reimagining, mending, and repairing, that women's perspectives can bring into city building. This Research Topic, and the resulting ebook, showcases the sophistication of current scholarship on gender in the city, paving the way for future advancements in both research and practice.

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