

How the Community Space Environment Shapes Behaviour and Relationships: A Community Co-Creation Design Toolkit

Experiencing both the COVID-19 pandemic and the rise of artificial intelligence has deepened my interest in the narrative of community spaces and their impact on social relationships. Over the past few years in London, I have explored how spatial environments shape diverse social groups—from autistic children in pediatric hospitals to behavioural patterns influenced by facial recognition and CCTV surveillance. These investigations have led me to examine how design interventions in community spaces affect social behaviour and relationships.

As a graphic communication designer, my research extends beyond critiquing spatial environments; it explores how design can actively shape the future and sustainability of community spaces. This study aims to develop a community co-creation design toolkit that enhances the perception, interpretation, and experience of spatial environments across different cultural and geographical contexts.

Understanding the role of community spaces in shaping behaviours and relationships is crucial to contemporary urban and design discourse. The influence of physical space on social interactions has been widely examined, from Lefebvre's (1991) concept of spatial production to Jacobs' (1961) critique of modern urban planning. Recent discussions have expanded beyond spatiality to include temporality, as Mazé (2019) argues, emphasising the importance of future-oriented and transitional design approaches. However, assumptions that participatory urban interventions naturally lead to empowerment are increasingly contested. Berry and Iles (2010) critique how many such initiatives are co-opted by institutional and economic forces, serving regeneration agendas rather than genuine community needs. Similarly, social spaces are not neutral but are shaped by existing power structures, reinforcing or challenging social hierarchies depending on their governance and accessibility. Wilkie et al. (2017) further argue that design practice itself is an active agent in the social invention of everyday life, shaping not just material environments but also the expectations and experiences of the people who inhabit them. This research aligns with these critical perspectives, investigating the intersection of spatial design, co-creation, and social sustainability while maintaining awareness of the risks of institutionalisation.

Spaces embedded with surveillance technologies inherently regulate behaviour. Drawing from Foucault's (1977) concept of panopticism, CCTV's ubiquity in urban spaces fosters self-regulation and influences social interactions. The relationship between surveillance and spatial discipline necessitates a critical examination of how technological interventions shape public behaviour. While Foucault highlights surveillance's disciplinary power, Kimbell's participatory design framework (2019) shifts the focus toward community-driven interventions, counterbalancing top-down control. However, as Berry and Iles (2010) argue, participatory initiatives often risk becoming instruments of urban regeneration rather than genuine platforms for collective agency. The integration of social design into governance and commercial agendas blurs the line between empowerment and control, raising questions about who ultimately benefits from participatory interventions. Kimbell's (2019) 'two-stage

social design practice framework' provides a methodology for interrogating these dynamics, emphasising participation and critical reflection while acknowledging broader socio-political influences.

Surveillance and control mechanisms structure interactions, yet spaces also encourage organic, unintended uses that challenge their initial design. For example, urban fountains repurposed by children as playful 'beaches' highlight the community's ability to reinterpret public spaces. Similarly, urban vegetation, such as building creepers, presents both aesthetic and structural dilemmas, demonstrating the paradox between design intent and lived experience. These examples illustrate how spatial adaptability plays a vital role in the evolving relationship between design and community behaviour.

Josefin Wangel (2018) underscores the importance of designing for multiple futures, advocating for adaptable spaces that accommodate diverse social practices. This aligns with Kimbell's two-stage social design methodology, which facilitates iterative, context-responsive interventions. To address the challenge of adaptive design, this research proposes a co-design toolkit that supports inclusive, portable, and participatory redesign of community spaces. Rather than seeking definitive solutions, the toolkit fosters continuous responses to emerging needs, ensuring long-term sustainability.

A key challenge in implementing a co-design approach is its transferability across cultural and spatial contexts. This toolkit will bridge these gaps by integrating adaptable mechanisms across languages, geographies, and socio-political environments. The research combines participatory design principles with adaptive urban planning to develop a co-creation toolkit, tested through workshops and case studies to evaluate its usability, adaptability, and impact on community engagement.

This study employs Kimbell and Julier's (2019) two-stage social design framework, integrating field surveys, case study analysis, and participatory design workshops. The first phase involves cataloguing existing case studies of adaptive community spaces, analysing user interactions, and developing prototype projects. The second phase refines research questions through stakeholder collaboration, ensuring consistency and coherence in addressing community needs. The co-creation toolkit will visualise the participatory design process, focusing on decentralisation and cultural specificity to enhance the transferability of social design practices across diverse environments.

The theoretical foundation of this research is grounded in key works in social and spatial theory, drawing from Lefebvre's (1991) concept of the production of space, Jacobs' (1961) critique of modern urban planning, and de Certeau's (1984) exploration of tactical urbanism and everyday spatial practices. Additionally, this research engages with contemporary debates on co-design, participatory urbanism, and social sustainability, referencing Sanders & Stappers' (2008) work on co-creation, Wangel's (2018) advocacy for designing for multiple futures, and Kimbell's (2019) two-stage social design practice framework. Methodologically, it aligns with practice-based and speculative research approaches, drawing from Wilkie et al.'s (2017) perspective on design as a tool for social invention and Salinas et al.'s (2019)

examination of civic engagement in service design. This integration of social theory, participatory design, and speculative methodologies provides a foundation for developing an adaptive, co-creative framework for community spatial transformation.

This research sits at the intersection of social design, urban studies, and participatory approaches, aiming to advance contemporary design theory by critically examining the role of urban community spaces in shaping public interactions. As Mazé (2019) asserts, design transcends aesthetics and functionality, actively shaping the social fabric of the future. This study contributes to this paradigm shift by developing practical tools for inclusive urban transformation, ensuring that participatory design remains a genuinely community-driven rather than institutionally co-opted endeavour.

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