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EDITORIAL

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The Complex Value of Temporary Communities

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Abstract

Across Europe, a shortage of affordable housing and workspace coexists with widespread vacancy in buildings, lots, and public spaces. Since the 1970s, squatting, anti-squatting, and co-management practices have turned this contradiction into an opportunity, with young people, activists, and creatives temporarily reclaiming empty spaces and, when displaced by rising rents, forming urban nomad communities. While the social and cultural relevance of these initiatives is widely recognised, the value they generate—and how to assess it—remains poorly understood. This thematic issue brings together 10 contributions that examine how temporary reuse of real estate and public space creates value for real estate management, urban development, and local communities, and why diverse actors choose to engage in it. The collected articles present cases from Belgium, the Netherlands, Portugal, Germany, Italy, Curaçao, and Australia, and identify four interrelated dimensions of value: activation, commons, care, and transformation that unfold differently across places, scales, and temporalities. Together, they argue that temporary communities generate effects that persist beyond the end of the temporary use itself, reshaping perceptions of place and future development trajectories, and call for new frameworks to recognise and support this complex value.

Keywords

spatial justice; temporary reuse; urban nomads; vacancy; value creation

1. Introduction

In Europe, we are facing a significant challenge: there's a shortage of affordable housing and workspaces, even as many cities are dotted with vacant buildings and lots that offer great potential for new uses. It's a striking contrast: countless homes, offices, public buildings, and industrial buildings are empty while people are searching for a place to live, work, and come together. Since the 1970s, movements around squatters, anti-squats, and co-management have emerged as innovative alternatives for utilising these spaces—even if only temporarily.

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Young individuals, activists, and creatives are claiming these spaces and exploring new ways of living and collaborating. These temporary communities highlight the pressing demand for urban space, usually occupying spaces at no or low rents for a limited duration, in many cases actively contributing to the community's vibrancy. Unfortunately, real estate and financial dynamics often force these groups to relocate, marking the shift from temporary residents to urban nomad communities—either by choice or circumstance.

These urban nomad communities are diverse, including young adults, students, workers, immigrants, and those experiencing homelessness. For some, it's a decision born from creativity and adventure; for others, it's simply a matter of necessity. To date, research and practice have yet to fully capture the value that urban nomads create through the temporary use of spaces, but their role in urban regeneration is recognised as significant. With the current high levels of vacant properties and, at the same time, a high demand for (affordable) space, the topic of temporary reuse is generating much interest in academia.

1.1. Temporary Use and Value Creation

In the gaps between different real estate use cycles, unused spaces constitute an opportunity for urban actors to give room to ideas for various uses based on public/private needs or subjective visions. Time and temporality have become important aspects of space value in contemporary cities. In some cases, temporality is organised and managed commercially, such as in coworking spaces like Spaces, Frame, WeWork, etc. Many of these started as experimental initiatives to temporarily reuse vacant office space but have since developed into commercial real estate and asset management companies. The temporary availability of vacant real estate has become a precious urban resource, allowing a variety of potential uses. As such, the reuse of vacant real estate is an open field for experimentation. Several temporary use projects experiment with combining different financial and economic models for the (co)governance of space, generating multiple impacts on the community, real estate, and neighbourhood.

Research has provided evidence of temporary reuse projects that reactivate unattractive areas, through experimenting with adaptation and different forms of reuse, both in buildings and in public space. Short-term initiatives experiment with innovative approaches, diverse forms of temporary dwelling, creative management, and collaborative initiatives. These initiatives contribute to diverse forms of placemaking and provide a wide range of social and financial-economic benefits but also face drawbacks and risks for the actors involved. For example, when a new use creates an attractive environment, at some point real estate rents and prices will increase, and the initiators of the reuse might be forced to move. Temporary uses are increasingly included in real estate management and in planning. However, assessment methods to understand, measure, and evaluate the multiple impacts and values that they generate across different levels and scales are lacking.

More knowledge is needed to support stakeholders, public authorities, and decision-makers in considering the complex value added by temporary communities. Hence, this thematic issue posed the following questions:

- How does temporary reuse contribute to value creation in real estate, urban development, and local communities?
- Why do diverse actors engage in temporary reuse, and how do they benefit from it?
- What methods are applicable to assess temporary reuse values for real estate management and urban studies?

Starting from these questions, contributions were invited that push the boundaries of how we understand, assess, and manage temporary re-uses and value creation at different scales. The aim of this thematic issue is to gather critical perspectives to advance knowledge for scholars and decision-makers in the fields of real estate management, urban planning, and multi-actor collaboration, to ensure equity in urban development.

This thematic issue compiles articles focused on the temporary use of buildings, urban spaces, and locations. It explores various aspects of temporary reuse, highlighting values related to temporality, liveability, and spatial justice, while also providing tools and frameworks to assist in decision-making and policy on this subject. The inspiration for this issue arises from the NOMAD postdoctoral project of Chiara Mazzarella, funded by the Marie Skłodowska-Curie Actions under grant number 101109623.

2. The Contributions

2.1. Economies of Collective Temporary Occupations in Brussels

Mazzarella et al. (2026) investigate the economies generated by collective temporary occupations (CTOs) to reuse vacant real estate in the Brussels-Capital Region. Although community-based occupations are widely acknowledged for producing social and cultural value, the diverse economies they activate remain less defined. The results of a comparative case analysis show that CTOs operate as hybrid economic systems, combining artistic creation, circular production, welfare services, and sharing practices, producing value through care, cooperation, and repair. This article positions CTOs as experimental forms of post-growth urban development, emerging as urban labs and examples of strategies for rethinking vacant properties.

2.2. Radical Heritage: The Introduction of Urban Fallows and the Value of Cyclical Rest

In the context of climate breakdown and socio-economic precarity, Sanliturk and Schmidt (2026) introduce the concept of urban fallows for rethinking urban heritage through the dynamic interplay of time, value, agency, and space. This article reframes vacant buildings as latent commons, as spatial and cultural reservoirs imbued with social memory, ecological potential, and the capacity to host alternative urban futures. Based on research by the Radical Heritage summer school, this article explores how to activate new value channels and cultivate new spatial sensibilities oriented towards long-term care, time, and cultural revaluation in the urban environment.

2.3. Making Time Matter: Intermittent Urbanism and the Politics of Staying

Cordeiro et al. (2026) propose intermittence to understand how temporal dynamics organise the everyday urban experience, framing intermittence as a rhythmic form of changes in use. The analysis of four Lisbon-based cases exemplifies how intermittent practices can sustain social, ecological, and cultural infrastructures without relying on permanent spatial occupation, while also exposing temporal inequalities tied to digital systems, ecological rhythms, and public space governance. The article argues that recognising time as a shared, structured, and unevenly distributed urban resource is crucial to understanding how people negotiate presence, continuity, and the politics of staying in contemporary cities.

2.4. Time After Time: Community-Led Participation in Urban Development Practices in Rotterdam

Santos et al. (2026) discuss the role of community-led initiatives (CLIs). Although they have been seen as contributors to sustainable and socially just urban transitions, their capacity to shape formal urban development processes remains insufficiently understood. This article examines how a grassroots case in Rotterdam can engage city-making over time. Findings indicate that temporary use enabled a common based on socio-cultural programming, shared stewardship, and informal knowledge infrastructures. The article argues that CLIs should be recognised as urban commons with the potential to inform more inclusive, collaborative, and reflexive approaches to urban development in Rotterdam and comparable contexts.

2.5. Caring Temporalities: The Role of Urban Space for the Liveability of Fluidly Housed Youth

Stadtlander et al. (2026) explore the role that public space plays in providing care for fluidly housed youth. These young adults are experiencing fluctuating conditions of homelessness, moving between couch-surfing, staying in overcrowded or informally occupied spaces, and sometimes experiencing periods of rooflessness. This article identifies three overarching socio-spatial needs of fluidly housed youth and three corresponding spatial potentials to activate and adapt urban space through radical care. It identifies urban spaces suitable for building infrastructures of care that meet the needs of privacy. Lastly, the article addresses how infrastructures of care can be developed to meet shifting needs in urban space.

2.6. (Food) Justice in the Interim? Temporary Urban Gardening, Welfare Activation, and Plural Valuation

Temporary urban gardening is seen as a tool for addressing vacancy, sustainability, and social inclusion, but how justice is enacted within welfare and labour market activation initiatives remains poorly understood. Bakunowitsch (2026) examines justice in a publicly funded urban gardening project in Dortmund, Germany, situated on a temporarily available plot and implemented as a labour-market activation measure. While participants experience gardening as meaningful and a source of social participation and belonging, these values are bounded by welfare regulations, temporary land lease, and non-market exchange rules. The article contributes to debates on temporary urban use, welfare-governed food practices, and inclusive sustainability.

2.7. Leveraging a Street Festival for Lasting Transformation in a UNESCO World Heritage Neighbourhood

Regales and Simons (2026) examine the impact of the Kaya Kaya street festival in Otrobanda, a temporary cultural event that has contributed to the repositioning of the UNESCO World Heritage Site Historic Willemstad, Curaçao. In this case, the temporary use of vacant historic properties and underutilised public spaces to host various cultural activities played a key role in positioning the neighbourhood as an attractive and artistic place. This article contributes to wider understanding of urban strategies by offering insights into how events as temporary use can contribute to revitalising historic neighbourhoods.

2.8. Taking Up Some Space: How Urban Space Use Supports Material Circularity in Outdoor Public Spaces

Reijtenbagh et al. (2026) analyse how temporary use of and for public space can accelerate the circular economy, based on a study of Amsterdam, revealing three main findings. First, the use of temporary vacant space serves different value propositions for different stakeholders. Second, value is created at different levels: the project level, the area level, or the city level. Third, the use of public space as a depot for public space materials creates both sustainable and public value.

2.9. Embracing the Liminality of Common Spaces: A Proposal for an Analytical Framework to Interpret Temporary Uses

Casprini et al. (2026) conceptualise temporary uses as a possibility to co-create common spaces, reconciling a multiplicity of stakeholders' values. Although being time-bound, temporary uses can generate social values. However, these values are hard to capture in traditional evaluation metrics and might be susceptible to favouring market values over social values. Based on a case study in Forlì, Italy, this article provides empirical evidence about how a shared identity is negotiated in the temporary reuse of abandoned real estate. Furthermore, the authors propose an interpretative analytical framework to understand how social values are co-created and distributed at the community level.

2.10. STAR (Sustainable Temporary Adaptive Reuse) Toolkit: Innovation for Value Creation in Commercial Property

In Australia, Connell-Variy et al. (2026) observed that the changes to work practices following COVID, particularly working from home, have affected commercial office values in Central Business District markets. This has resulted from companies needing less space and taking advantage of discounts on high-quality office space. In response to these shifts, efforts to rejuvenate the commercial property sector in Australia include the development of the Sustainable Temporary Adaptive Reuse (STAR) Toolkit. The STAR Toolkit develops a series of resources that enable owners to assess an asset's short-term reuse potential. This article demonstrates the capacity of the STAR Toolkit to help reposition an asset by sustainably reusing vacant space.

3. Discussion

Across the contributions (Table 1), vacancy is framed as a condition of possibility. Cases show how vacant spaces in buildings or in the public space can become commons, common spaces, cultural incubators, infrastructures of care, sites for circular economy, incubators of diverse economies, or platforms for collective action. Temporary communities activate resources that would otherwise remain dormant, generating new social relations, governance arrangements, and imaginaries for urban futures, creating places that were just empty spaces. Temporality challenges the conventional understandings of urban value rooted in permanence, ownership, and productivity.

The articles in this thematic issue question how diverse forms of temporary uses in real estate and public space generate different dimensions of value. The dimensions of value studied in the 10 articles can be grouped in:

activation value, commons value, care value, and transformative value. The challenge for researchers, practitioners, and policymakers is therefore to consider how temporary communities create, negotiate, and distribute value over time and empower these communities through different temporalities (short-term, medium-term, or long-term) according to different social needs and urban development trajectories.

Table 1. Overview of the contributions in the thematic issue Temporary Use and Value Creation in Urban Context.

Article Authors	Article Objective	Temporary Use Case Analysed	Case Location	Values and Impacts	Methods for Understanding Values
Mazzarella et al. (2026)	Investigate diverse economies generated by reusing vacant real estate	Collective Temporary Occupation	Brussels Capital Region, Belgium	Economic activation; transformative value CTOs as post-growth urban development labs	Comparative case analysis
Sanliturk and Schmidt (2026)	Rethink urban heritage through the concept of *urban fallows*	Vacant heritage buildings reframed as latent commons (*urban fallows*)	UK, Brazil, India, Japan, Serbia (based on Radical Heritage summer school)	Commons governance; transformative and future-making	Conceptual framework development informed by summer school research
Cordeiro et al. (2026)	Understand how temporal dynamics organise urban experience through the concept of *intermittence*	Intermittent urban practices	Lisbon, Portugal	Care and social reproduction; transformative and future-making	Comparative case analysis
Santos et al. (2026)	Understand the role of community-led initiatives in urban development processes	Community-led initiative	Rotterdam, Netherlands	Commons governance	Qualitative analysis through single case analysis; longitudinal action-research
Stadtlander et al. (2026)	Explore the role of public space in providing care for fluidly housed youth	Public/urban space use by fluidly housed youth	Brussels, Belgium	Care and social reproduction	Mixed-method approach
Bakunowitsch (2026)	Examine how justice is enacted within welfare–labour market activation initiatives via urban gardening	Publicly funded urban gardening project on temporarily leased plot	Dortmund, Germany	Care and social reproduction	Qualitative analysis through interviews, participant observation, and document analysis

Table 1. (Cont.) Overview of the contributions in the thematic issue Temporary Use and Value Creation in Urban Context.

Article Authors	Article Objective	Temporary Use Case Analysed	Case Location	Values and Impacts	Methods for Understanding Values
Regales and Simons (2026)	Explore long-lasting impacts of a street festival on a heritage site	Street festival	Willemstad, Curaçao	Economic activation; transformative and future-making	Case study analysis
Reijtenbagh et al. (2026)	Analyse how temporary use of/for public space can accelerate the circular economy	Temporary vacant public space used as material depot	Amsterdam, Netherlands	Economic activation (plural value)	Case study analysis
Casprini et al. (2026)	Conceptualise temporary uses as a means to co-create common spaces	Socio-cultural common reuse	Forlì, Italy	Commons and governance	Case study analysis
Connell-Variy et al. (2026)	Develop a toolkit to assess the short-term reuse potential of commercial assets	Vacant offices	Australia	Social, environmental, economic activation	Research output analysis

Thus, the articles in this thematic issue show the complex value of temporary communities and how it unfolds across different value dimensions, scales, and temporalities. Some impacts are immediate and tangible during the use, providing services to *users*, visitors, or residents. Other dimensions of value emerge gradually through the accumulation of trust, knowledge, social networks, collective identities, and capacities for self-organisation. When temporary use comes to an end, its effects persist through transformed perceptions of place and (sometimes) in transformed development trajectories.

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Conflict of Interests

The authors declare no conflict of interests.

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Chiara Mazzarella is an architect and researcher. She has been a Marie Skłodowska-Curie Postdoctoral Fellow (2023–2025) at the Department of Management in the Built Environment (MBE), Faculty of Architecture and the Built Environment at Delft University of Technology (TU Delft), where she developed the NOMAD research project on the value of experimental community-based temporary uses. She studied architecture in Italy, Chile, and Spain, and holds a PhD in Architecture (2021) on circular city models for wastescape regeneration within the H2020 REPAiR project. She is interested in unconventional ways of reusing vacant buildings and in bridging research and practice by collaborating in trans-disciplinary projects.

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ARTICLE

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Economies of Collective Temporary Occupations in Brussels

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Abstract

In European cities, strengthening local grassroots initiatives is trending. Citizen groups often find space only by temporarily occupying unused buildings, which, in turn, creates value through diverse activities and economies. While temporary uses are acknowledged for their capacity to generate social and cultural value, the diverse economies they activate remain undefined. This article investigates the economies generated by collective temporary occupations (CTOs) in the reuse of vacant real estate in the Brussels-Capital Region. Based on the hypothesis that CTOs contribute to post-growth urban development, this article explores economic activation, spatial characteristics, and temporal dimension in 10 cases. Results show that CTOs enhance place quality by combining artistic creation, sports facilities, circular production, welfare services, and sharing practices. From small neighbourhood infrastructure to large metropolitan hubs, temporality ranges from 1 to 10 years, with longer-lasting initiatives functioning as commons despite their temporary status. By recognising the diverse dimensions of value creation and the role of CTOs as generators of new economies, this research contributes to the study of temporary uses in post-growth urban planning.

Keywords

Brussels; new economies; post-growth; temporary urbanism; temporary uses; value creation

1. Introduction

Cities are evaluated by what they attract, sell, or grow, though the places their residents value most often do none of these things. This capacity to attract capital and compete globally has long been central to urban studies, reflecting entrepreneurial governance and neoliberal planning rationalities (Brenner et al., 2012; Harvey, 1989; Jessop, 1997). Within this paradigm, place quality has been tied primarily to growth-led urban governance, yet emerging frameworks challenge this alignment, proposing social, ecological, and equity-based criteria for defining quality beyond economic performance (Rydin, 2013, 2025).

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Carmona (2019) identified place quality as strongly associated with design quality in the built environment and with the processes and outcomes of development, regeneration, and long-term management of places. In a place-shaping process (Carmona, 2014), the quality of a place generates value for society, health, the economy, and the environment. Place quality can be described through measurable parameters as identified by Carmona and de Magalhães (2009)—cleanliness, accessibility, attractiveness, comfort, inclusiveness, vitality, and safety—which are constitutive of local environmental quality. However, wealth and economic growth remain the primary measures of urban development, and market-driven logic continues to shape most real estate development and urban transformation (Brenner et al., 2012; Harvey, 1989).

Recent research in urban studies criticises growth-centric development (Rydin, 2025; Savini et al., 2022) and proposes post-growth as an alternative framework for designing places beyond economic performance. Post-growth planning calls for decoupling urban development from growth imperatives and promoting sufficiency, resilience, and degrowth principles in city-making (Rydin, 2025; Savini et al., 2022). Rydin (2025) proposed that national and local policies promote a diverse economy that supports the small and medium-sized enterprise sector and a social economy grounded in civil society. Within the post-growth paradigm, bottom-up and community-based initiatives have emerged as an increasingly relevant field of inquiry. Grassroots initiatives, cooperative housing, community land trusts, and commoning projects demonstrate that real estate can function as a collective infrastructure for living, working, and sharing places (Bauwens & Niaros, 2017; Gorenflo et al., 2018). Rydin (2025) stressed the relevance of the hybridity of organisations, the importance of small businesses and the social economy sector, the need to provide secure landownership and common ownership, and the need to circulate knowledge of effective and viable business models within diverse economies.

Post-growth temporal urbanism treats time as a constitutive element of urban life and calls for values that prioritise craft over capital, people over products, and collective well-being over expansion and economic return (Chang & Wunderlich, 2025). In this trajectory, research has revealed the importance of bottom-up initiatives at both the local scale, through temporary uses (Oswalt et al., 2013), and the urban scale, in the context of temporary urbanism (Madanipour, 2018). Bottom-up temporary uses have been gradually integrated into urban regeneration strategies (Kim, 2019; Martelloni et al., 2023; Martin et al., 2019; Martínez, 2017; Zhang, 2020). Likewise, community-led adaptive reuse of vacant buildings is recognised as playing a role in neighbourhood revitalisation and heritage conservation (Kip & Oevermann, 2022). Yet Ferreri (2021) highlighted that the prefigurative power of temporary uses, as the potential to prototype alternative futures, is becoming instrumentalised, neglecting users' vulnerability, and Bragaglia and Caruso (2022) discussed the risk of instrumentalising temporality for neoliberal policies. Nevertheless, cultural entrepreneurship developing in temporary spaces suggests the possibility of reimagining the urban economy from the bottom up (Mens et al., 2023).

Community-based temporary use involves repurposing underused buildings for multiple purposes, giving new life to abandoned spaces. However, despite long-standing interest in temporary use and temporary urbanism, specific knowledge on value creation and new economies is scattered. To address this gap, this study asks which economies emerge from the community-based temporary use of vacant buildings and what value they add to places.

This article is structured into five sections. Following this introduction, Section 2 reviews the literature on temporary use and value creation and identifies related economies. Section 3 situates the study within the context of the Brussels-Capital Region (BCR). Section 4 describes the methodology and analytical framework and presents the case studies. Section 5 presents the findings, and Section 6 discusses the results and implications for post-growth planning.

2. Economies and Value of Temporary Real Estate Reuse in the Literature

The literature on temporary use in real estate and the built environment suggests that value creation is linked to diverse economies. A selection of 77 papers was conducted and analysed adopting the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) method (Page et al., 2021) and included scientific articles, conference proceedings, and book chapters published in English, French, and Spanish from 2000 to 2025 using the strings: "temporary urbanism"; "temporary uses" AND "urban"; "temporary use" AND "building"; "temporary use" AND "real estate"; "temporary uses" AND "vacant spaces"; "temporary reuse"; "temporary uses" AND "commons"; "temporary uses" AND "collective." The analysis focused on real estate, dimensions of value, and economies. The link between economies and value in the selected articles is the result of coding based on the terms "economy" and "value" (Figure 1).

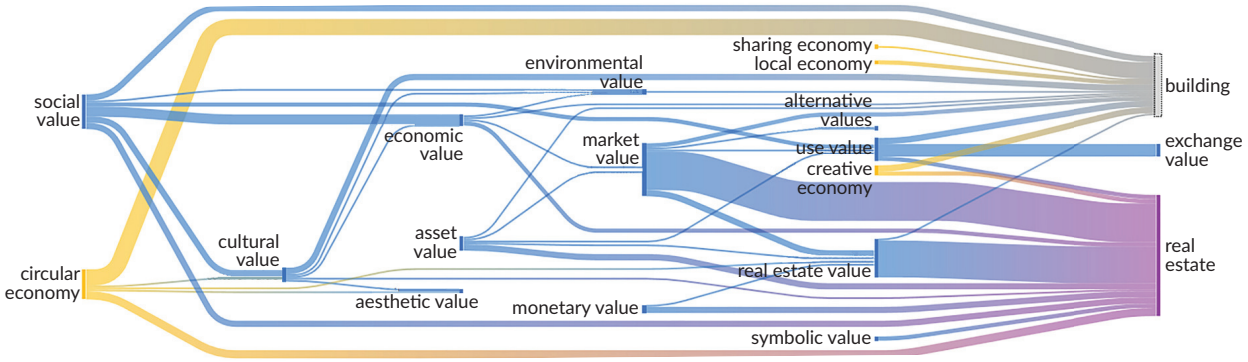


Figure 1. Economies and value of temporary use in vacant real estate in scientific literature. Elaboration by the authors based on the systematic literature review in Atlas.ti.

The concept of non-market value is used here to describe benefits that are not fully reflected in prices, rents, transaction volumes, or asset appreciation. Klamer's value-based approach is useful in this respect because it shifts attention from quantities alone to the qualities that people and communities consider important, including shared and common goods (Klamer, 2020; Petrova et al., 2022). The work of Throsby (1999, 2000) on cultural capital shows that assets may embody cultural value and economic value, which is particularly relevant when temporary occupations create cultural value, memory, identity, or public access that cannot be reduced to market price alone. For this article, non-market value therefore refers to social, cultural, ecological, and collaborative outcomes that contribute to place quality, even when they are only weakly captured by conventional real estate valuation.

Results show that circular, creative, local, and sharing economies (Table 1) emerge and overlap in temporary spaces. This understanding aligns with the heterogeneity of economic practices beyond a single market-centred model (Gibson-Graham & Dombroski, 2020). In the context of the circular economy,

temporary uses have been recognised to generate aesthetic, cultural, material, and financial value through the reuse of buildings, waste reduction, and resource efficiency (Calzati et al., 2022; Fatigato & Capaldo, 2024; Kawa et al., 2024; Mangialardo & Micelli, 2017a; Meslec & Haase, 2024; Pinard, 2020; Roversi et al., 2021). Kawa et al. (2024) explored the material value of temporary makers' spaces, addressing their capacity for material reuse and resource minimisation. Through different lenses, Fatigato and Capaldo (2024) examined the socio-economic impacts of transitory third places, Meslec and Haase (2024) highlighted temporary occupations as incubators for new business models that repurpose underused space at multiple scales, and Roversi et al. (2021) examined the role of cultural heritage as a catalyst for circular urban processes.

The creative economy dimension emphasises social and use value generated through cultural production, artistic experimentation, and participatory activities (Colomb, 2012; Debrunner & Gerber, 2021; Honeck, 2017; Mangialardo & Micelli, 2017b; Martínez, 2017; Munzner & Shaw, 2015; Seldin, 2020). Creative temporary use provides affordable spaces, enabling artistic work, events, and other activities that would be unviable in market-priced real estate. The value generated here circulates through affordable access to production space, public programming, artistic experimentation, cultural employment, and network creation. These mechanisms produce indirect economic effects, but their primary contribution lies in cultural and use value as inaccessible spaces become available for collective expression, learning, and public encounter.

Temporary uses connect to local economic circuits, too, by supporting neighbourhood entrepreneurship, strengthening short supply chains, providing services, and, in some cases, proximity-based employment (Andres, 2011; Carruthers & Tretter, 2022; Crump, 2020; Kostaki et al., 2024; Mangialardo & Micelli, 2018; Martin et al., 2019; Naghibi & Faizi, 2022). Local economies remain connected to the market economy but differ from extractive market logics in the way value is redistributed within the neighbourhood. Their contribution to place quality manifests in local employment generation, street-level activation, micro-investment initiatives, the provision of everyday services, and the relationships between temporary users and local communities.

Furthermore, the literature on temporary use identifies the sharing economy as an opportunity for value creation. Temporary uses contribute to collaborative, network, and environmental value, rooted in collective resource use, shared governance, and peer-to-peer exchange (Carlton & Vallance, 2017; Fagnoni et al., 2017; Mangialardo & Micelli, 2021), frequently establishing shared community activities, open-access spaces, or co-governed infrastructures. Sharing-economy practices matter not because they create market platforms, but because they organise access, stewardship, and collective use around spaces and resources that would otherwise remain underused. Keller et al. (2026) highlighted that non-commercial sharing is largely disconnected from commercialised practices and primarily centres on intangible goods. Relying on personal contacts for organisation and motivation, it is embedded within the neighbourhood as a primary site of exchange, depending on specific actors' influence, motives, and alliances.

Across these four economic paradigms, temporary uses have been recognised as mechanisms for creating multiple forms of value. Based on this, a framework of the economy, temporary uses, and value (Table 1) is presented to guide this study.

Table 1. Economy, temporary uses, and value from the literature on temporary use in real estate.

Economy and temporary uses	Authors	Value	Indicators
A. Circular economy	Calzati et al. (2022); Fatigato and Capaldo (2024); Kawa et al. (2024); Mangialardo and Micelli (2017a); Meslec and Haase (2024); Pinard (2020); Roversi et al. (2021)	Aesthetic value Cultural value Real estate value Material value	A1. Reuse and adaptation of existing buildings A2. Reduction of construction waste A3. Increased lifespan of materials
B. Creative economy	Colomb (2012); Debrunner and Gerber (2021); Honeck (2017); Mangialardo and Micelli (2017b); Martínez (2017); Munzner and Shaw (2015); Seldin et al. (2020)	Social value Use value	B1. Community engagement B2. Production of cultural goods B3. Innovation and experimentation B4. New employment in creative sectors
C. Local economy	Andres (2011); Carruthers and Tretter (2022); Crump (2020); Kostaki et al. (2024); Mangialardo and Micelli (2018); Martin et al. (2019); Naghibi and Faizi (2022)	Economic value Community value	C1. Support for local businesses C2. Short supply chains C3. Local job creation C4. Neighbourhood revitalisation C5. Increased local investment
D. Sharing economy	Carlton and Vallance (2017); Fagnoni et al. (2017); Mangialardo and Micelli (2021)	Collaborative value Network value Environmental value	D1. Shared use of urban spaces D2. Resource efficiency D3. Collective ownership models D4. Peer-to-peer exchange D5. Strengthened social networks

3. Research and Policies for Temporary Occupations in the BCR

The spatial planning of the BCR has long been shaped by fragmented and conflicting policies across government agencies, institutional complexity arising from the regional border, and a tendency to prioritise market interests in planning decisions (Romańczyk, 2012).

In the post-war period, the city underwent massive urban transformations and fragmentation, rooted in the reforms that produced Belgium's multi-level governance system. The city lacked a coherent regional planning instrument until the 1960s (Kesteloot & Saey, 2002). Real estate development, the rapid expansion of European institutional functions, and weak planning regulation fragmented neighbourhoods, displaced communities, and entrenched socio-spatial inequality, particularly in inner suburban areas (Heydari, 2022). These conditions of legal uncertainty have historically been exploited by temporary occupations. Squatting movements began occupying vacant buildings from the 1970s onwards, and these practices evolved in the 1990s and 2000s, reorienting them as opportunities for experimentation outside market circuits (De Smet, 2013; Ferreri, 2021). The introduction of neighbourhood contracts in 1994, following the creation of the BCR in 1989, gave residents new tools to shape urban development (Romańczyk, 2015). By the 2010s, civic

actions in vacancy occupation had consolidated into structured non-profit organisations that mediated between property owners, public bodies, and communities, developing a model of temporary urbanism as a socially grounded alternative to both commercial vacancy management and squatting (Calzati et al., 2022).

In recent years, the BCR has become one of the most emblematic European cases of the institutionalisation of temporary uses. The establishment of the public office Guichet des Occupation Temporaire (Temporary Occupation Desk; temporary.brussels, n.d.) has formalised temporary occupations as a recognised planning and policy tool for vacant properties, coordinating property owners, project operators, and public administrations.

A study on temporary uses in the Brussels region (Rouet et al., 2026) identified 126 temporary use projects across the BCR. It recognised that Brussels has two policy instruments that are relevant for temporary use planning:

1. Sustainable Neighbourhood Contracts: Contrats de Quartiers Durables, created in 1994, which respond to local needs and integrate temporary projects into localised social and environmental regeneration efforts;
2. Master Development Plans: Plans d'Aménagement Directeur, which have a strategic and regulatory component, to allow temporary use to be included in long-term planning scenarios.

The mapping reveals a high concentration of temporary use in the inner suburbs. Overall, projects are distributed across 17 of the region's 19 municipalities. The study included projects larger than 100 m² (built or unbuilt), lasting more than one year, and managed by a designated operator, regardless of their specific purpose. Spatially, half of the identified projects are located within "urban regeneration zones," which cover 30 km² out of the BCR 162 km². From an organisational perspective, the report found that 77% of the operators surveyed belong to the non-profit sector. In terms of economic model, the survey distinguished between commercial resources (derived from sales of goods and services) and non-commercial resources (including public subsidies and other external support): 69% of operators combine both, indicating hybrid resource structures that blend market and solidarity-based logics, while 31% rely solely on commercial revenues.

Thus, in functional terms, temporary use serves different purposes, responding to urban emergencies, supporting civic engagement, enabling cultural production, and fostering new ways of living in the BCR.

4. Materials and Methods

Because the Guichet des Occupation Temporaire names the temporary use of vacant buildings as "temporary occupations," this article adopts this terminology. Focusing on community-based temporary uses, the article scopes its analysis to cases termed collective temporary occupations (CTOs). A cross-case comparison (Yin, 2018) examined 10 CTOs in Brussels. Qualitative methods are appropriate here because the research questions concern the conditions of value creation, requiring interpretive analysis of activities, governance arrangements, and spatial configurations.

4.1. Case Studies of CTOs

The dataset is drawn from the Guichet des Occupation Temporaire inventory (temporary.brussels, n.d.), which lists more than 200 temporary uses across the BCR. From this pool, 10 cases were selected based on hosting (a) temporary non-housing uses and (b) multipurpose social spaces with diverse social aims and functions, such as *third places* (Jeffres et al., 2009; Oldenburg, 1999). Secondary selection criteria were based on data availability and the diversity of real estate, activities, and locations (Table 2).

The case selection did not aim for statistical representativeness. Rather, the goal was to show diverse cases of CTOs in the BCR (Figure 2); thus, the cases differ in surface area, spatial configuration, and management structure (Table 2).



LEGEND					
ACTIVITIES (by main focus)					
Social, Sportive, Educational	1	**MONA** Jette	2022 – To date (2026)	6	**Circle Park** Anderlecht	2021 – To date (2026)
Cultural / Artistic	2	**Park Ouest** Molenbeek-Saint-Jean	2022 – To date (2026)	7	**Circularium** Anderlecht	2020 – To date (2026)
Productive / Entrepreneurial	3	**Espace Lessines** Molenbeek-Saint-Jean	2022 – 2024	8	**Grand Hospice** Brussels (City Centre)	2021 – To date (2026)
Mixed uses (multi-activities)	4	**La Crèche** Molenbeek-Saint-Jean	2024 – April 2026	9	**Bûûmparck van Praet** Laken (City of Brussels)	2022 – April 2026
	5	**La Serre** Ixelles	2017 – 2024	10	**Reset Brussels** Brussels (City Centre)	2021 – 2025

Figure 2. Map of collective temporary occupation project cases in the BCR.

Table 2. Case studies in Brussels.

Place name	Municipality	Surface (m^2)	Activities	Organisation managing the CTOs	Building owner	Spatial typology	Years
MONA	Jette	4,600	Social	Toestand (non-profit)	Private	Building	2022–2026 (to date)
Park Ouest	Molenbeek-Saint-Jean	30,000	Social, Cultural	Toestand (non-profit), Bruxelles Environnment (Brussels Environment) (regional agency)	Public	Open land	2022–2026 (to date)
Espace Lessines	Molenbeek-Saint-Jean	600	Social, Sportive, Educational	Commune de Molenbeek-Saint-Jean (public authority)	Public	Open land	2022–2024
La Serre	Ixelles	850	Cultural, Social, Artistic, Housing, Food, Repair	Communa (non-profit)	Public	Building	2017–2024
Circle Park	Anderlecht	18,000	Cultural, Social, Sportive	Entrakt – Act Urban (transitional real estate manager)	Public	Former industrial site	2021–2026 (to date)
Circularium	Anderlecht	20,000	Productive, Entrepreneurial, Social	Makettt (transitional real estate manager)	Private	Former industrial site	2020–2026 (to date)
Grand Hospice	Bruxelles	16,000	Cultural, Social, Artistic	Pali Pali (transitional real estate manager)	Public	Building	2021–2026 (to date)
Bûûmparck Van Praet	Oorlogskruisenlaan	5,000	Social, Artistic, Park, Gardening	Buumplanter/NoWayBack (non-profit)	Public	Open land	2022–2026 (to date)
Reset Brussels	Bruxelles	30,000	Cultural and event-related activities, Industry, Services	Arty Farty Brussels (non-profit)	Public	Building	2021–2025
La Crèche	Molenbeek-Saint-Jean	2,130	Creative and artisanal productive activities, Commerce, Storage	Pali Pali (transitional real estate manager)	Public	Building	2024–April 2026

Notes: Source: Data selected from the Guichet des Occupation Temporaire dataset and integrated by the authors.

Each case was studied individually, then compared with others to reveal differences and similarities.

4.2. Data Collection

Primary data consisted of publicly accessible project documentation, including websites, internal descriptions, and programme details. For La Serre, direct observations and in-depth interviews were conducted. Additional information was obtained from secondary sources, including projects' reports, press articles, prior academic studies, and social media data. Social media data were collected from Instagram and Facebook to understand place popularity. Social media data could be biased, as they lack representativeness, access is unequal, and information is difficult to filter and validate, but they provide large-scale, fast insights into people's activities, experiences, and perceptions of urban spaces (Martí et al., 2019) and have been widely used in urban studies (Chen et al., 2019).

4.3. Economy, Space, and Time: Analytical Framework

Analysis of the qualitative data collected followed a coding process (Table 3) based on three dimensions identified as relevant from the literature:

- Economic activation, based on activity types, programming, organisation type, and uses;
- Spatial characteristics, including property type, urban contexts, and real estate typologies;
- Temporal dimension, ranging from short-term uses to long-term temporary infrastructure.

Table 3. Analytical framework: value creation in CTOs through economy, space, and time.

Dimension	Analytical focus	Criteria (codes)
Economic activation	Economy mobilised by the activities of a CTO (What do CTOs do? What kind of organisations have been involved?)	Kind of activities Kind of programming Organisation type Temporary use practices
Spatial characteristics	How activities materialise spatially (What kind of real estate hosts the activities? In what kind of neighbourhood?)	Property type Urban context Real estate typology (industrial, office, heritage, green) Role in urban transformation
Temporal dimension	Duration and relation to future (re)developments (How long has the CTO operated? How is it related to future redevelopment?)	<2 years: pre-redevelopment 2–5 years: transitional phase >5 years: long temporary infrastructure

5. Results

The case comparison results are organised around three dimensions: economies, space, and time (Table 3).

5.1. Economic Activation

The CTO activities (Table 2) reveal that the 10 cases function as third places where socio-cultural activities produce value through multiple economies simultaneously: social, creative, circular, and sharing practices. Hybrid uses produce multiple values, such as material reuse, cultural production, community engagement, welfare provision, and shared resources. However, each CTO serves a specific use case. Circular economies are central in Circularium (2025a, 2025b, 2025c) and La Crèche (2025; Pali Pali, 2025b), where workspaces for fabrication, repair, recycling, and short supply chains are combined with cultural and social functions, managed by two socially oriented companies: respectively, Pali Pali and Makett. They brought together artisans, start-ups, and fablabs with people, implementing small-scale job creation, neighbourhood services, and active engagement with local communities.

Creative and cultural economies emerge in Reset Brussels, Grand Hospice (2025a, 2025b, 2025c; Pali Pali, 2025a), and Circle Park (2025; Entrakt, 2025), hosting exhibitions, events, concerts, performances, and debate events combined with collective artistic production.

The local welfare and social economies of Espace Lessines (Quartiers1080Wijken, 2025), MONA (2025; Toestand, 2025a), La Serre (Communa, 2025; La Serre, 2025), and Bûûmparck Van Praet (Bûûmplanters, 2025a, 2025b, 2025c) have provided everyday support infrastructures, including food distribution, homework schools, therapeutic workshops, community gardening, and volunteering. Here, the primary outputs are community value and social inclusion. The public authority manages Espace Lessines under the "Autour du Parc de l'Ouest" Sustainable Neighbourhood Contract. MONA is managed by Toestand, a non-profit organisationspecialising in the temporary use of vacant urban spaces for social and cultural purposes. La Serre was coordinated by Communa, a non-profit organisation that occupies empty buildings as living, playing, working, and creating spaces, with a community-based approach. The aggregative power of CTOs is particularly evident during special occasions, such as the closing celebration of each place. As at the Dernier Service at La Serre (Figure 3), a sense of belonging to a place and its community confronts the prospect of leaving the space, while the community faces an uncertain future.

Sharing and community-based practices recur across cases. Co-governance models are explicit at La Serre, Grand Hospice, and Park Ouest (Toestand, 2025b), while Bûûmparck Van Praet and MONA emphasise open access and cooperative stewardship, with shared use of space, socio-cultural events, and informal mutual aid networks.

In the 10 cases, CTOs activate sharing economies as social infrastructure. They make spaces accessible with open initiatives, social support, and opportunities to collaborate in placemaking. Commercial activities are small and complementary to socio-cultural objectives and relational dynamics. Thus, their value is place-based, rooted in the connections among users, places, neighbourhoods, and local practices.



Figure 3. Dernier Service: Closing event of La Serre, featuring a CTO of the space, extending from the interior into the street Rue Gray. Photos by C. Mazzarella, June 2024.

5.2. Spatial Characteristics

Observing the spaces and activities of the 10 CTOs, three main clusters can be distinguished, which are described in the following sections.

5.2.1. Neighbourhood-Scale Infrastructures (600–2,600 m²)

Espace Lessines, MONA, La Serre, and La Crèche provide everyday infrastructure (kitchens, workshops, gardens, and social services) and serve as accessible open spaces in residential neighbourhoods. Their impact is strongly local, strengthening social cohesion and access to amenities. Espace Lessines occupies a

municipal building in Molenbeek, and MONA a former convent in Jette La Serre occupied a former covered car park and two adjacent buildings in Ixelles. The Municipality of Ixelles acquired the vacant hangar and adjacent buildings through a right of pre-emption under the Maelbeek Sustainable Neighbourhood Contract and designated Communa as operator. Eventually, in 2023, the municipality sold the building to Community Land Trust Brussels, which will create housing and a collective ground floor as a community space, continuing the social programming developed during the temporary phase. La Crèche is a former municipal nursery (Crèche Reine Fabiola) in Molenbeek. The former *crèche* has been transformed into a temporary occupation space hosting cultural and social projects managed by Pali Pali.

5.2.2. Large Metropolitan Hubs (15,000–30,000 m²)

Reset Brussels, Grand Hospice, Circularium, and Circle Park host high-visibility cultural, sporting, or productive programs and attract regional visitors. Reset Brussels (2025a, 2025b) was a large-scale cultural and events space. In the former Dexia building, a bank headquarters in Brussels, a 33,000 m² structure was in transition from a bank to a future police centre. The non-profit organisation Arty Farty managed it since 2021 but closed it in November 2025. Grand Hospice is a cultural and civic hub in the classified neoclassical former hospice Pacheco Institute in central Brussels, owned by the Public Centre of Social Action (Centre Public d'Action Sociale). While major renovation work for housing and collective services is underway, the Centre made the site available for an innovative socio-cultural project. The planned redevelopment includes approximately 50 mid-range housing units, serviced residences, and student accommodation. Circularium is a circular production and entrepreneurial hub in a former D'Ieteren car factory and showroom complex in the Cureghem district of Anderlecht. D'Ieteren decided to wait to see how the rapidly changing neighbourhood would develop before committing to permanent plans, resulting in a temporary circular-economy project. Future plans include possible residential development.

5.2.3. Urban Laboratories for Future Development

Park Ouest, Bûûmparck Van Praet, and Grand Hospice work as prefigurative spatial tools, testing uses and governance models that inform longer-term redevelopment plans (future park and future housing/services). Park Ouest is a social and cultural programme on a former railway wasteland of approximately three hectares in Molenbeek, managed by Toestand since 2022. The site formerly served as a point of passage for livestock and coal and stood largely unused for 30 years, marked by overgrown, dilapidated warehouses. The temporary occupation is explicitly designed as a participatory planning tool. The site is subject to a master development plan envisaging housing, commerce, and a recreational park, with citydev.brussels (the BCR public urban development agency) mandated to coordinate the overall redevelopment. In a recent development, the park has been confirmed as permanent. Authorities have announced plans to transform it into a large urban park. Bûûmparck Van Praet is a community gardening and ecological activation project on vacant public land in Neder-Over-Heembeek, managed by NoWayBack/Bûûmplanters since 2022. The site is the future heart of a planned new neighbourhood, where a fully new district will be built, including a large park, school, housing, a nursery, local businesses, and a marshland forest. The temporary occupation prefigures this transformation, testing uses and building community ownership ahead of permanent development.

5.3. Temporality of Occupation

CTOs vary significantly in duration and stability, and three temporal regimes emerge (Table 4).

Table 4. The duration of the cases of CTOs.

Type of temporality	Cases	Characteristics
Short-term activation (<2 years)	Espace Lessines, La Crèche Fabiola (initial phase), MONA (early stage)	High intensity but precarious; often pre-demolition or awaiting redevelopment; strong but time-sensitive local benefit
Medium-term experimentation (2–5 years)	Reset Brussels, Grand Hospice, Bûûmparck Van Praet, Circle Park, Park Ouest, Circularium	Enough time to consolidate networks, routines, and public identity; often linked to future transformation processes
Long-term temporary infrastructures (>5 years)	La Serre, Circularium (if extended)	Operate as stable neighbourhood places; symbolic and social identity

Duration is the most sensitive characteristic of CTOs because, in both short-term activations, medium-term experimentation, and long-term infrastructures, when the place works well and communities get used to it, closing the space challenges the endurance of the social value created. Interviews at La Serre in 2024 showed concern about the future of the communities that constituted that third place.

Analysis of popularity in 2025 in relation to CTOs' duration shows that the longest-running occupation is also the most followed on social media—La Serre (≈7 years, 11,245 followers)—indicating that digital visibility accumulates over time as places and communities consolidate. Recently activated sites, such as La Crèche (≈1.5 years, 698 followers) and Espace Lessines (≈2 years, 1,251 followers), demonstrate lower popularity and visibility on social media. Space dimension plays a similar but less linear role. Larger sites, such as Reset Brussels (30,000 m², 4,053 followers) and Circle Park (18,000 m², 11,073 followers), tend to attract more users and produce more visually shareable content, while small-scale neighbourhood infrastructures, such as Espace Lessines (600 m²) and La Serre (850 m²), only achieve similar visibility when paired with high cultural output. Activity type is the strongest differentiator, with spaces rooted in creative or sporting programming showing the highest number of followers (Circle Park: 11,073; La Serre: 11,245). Welfare-oriented or circular production projects cluster significantly lower (Circularium: 4,990; MONA: 2,329; Espace Lessines: 1,251). This suggests that external recognition, as measured through social media visibility, reflects aesthetic and experiential appeal rather than the depth of social or environmental value produced. Thus, CTOs may generate significant local impact while remaining digitally invisible, a gap with implications for how policy legitimises, funds, or renews temporary occupations.

5.4. Cross-Case Comparison

Table 5 synthesises the cross-case findings across the analytical framework (Table 3).

Table 5. Synthesis of cross-case findings by analytical dimension.

Dimension	Analytical focus	Criteria (codes)	Synthesis of findings across the 10 cases
Economic activation	Economy mobilised by the activities of a CTO	Kind of activities	CTOs show a combination of at least two of circular, creative, local/welfare, and sharing activities. Circular economy is central in Circularium, La Crèche, and (alongside creative/social) La Serre. Creative/cultural economy is central in Reset Brussels, Grand Hospice, and Circle Park. Welfare/local economy is central in MONA, Espace Lessines, and Bûûmparck Van Praet.
		Kind of programming	Programming ranges from everyday welfare services (medical support, food distribution, and homework schools) to high-visibility cultural events (exhibitions, concerts, and performances) to productive/fabrication activities (repair and short supply chains). Programming intensity and visibility do not correlate with depth of social value produced.
		Organisation type	Three organisation types emerge: non-profit organisations (Toestand, Communa, Arty Farty, and Buumplanters), transitional real estate management companies (Entrakt, Makettt, and Pali Pali), and public authorities (Commune de Molenbeek for Espace Lessines).
		Temporary use practices	Sharing-economy practices (co-governance, open access, and cooperative stewardship) cut across nearly all cases regardless of primary economic activation, rather than defining a separate subgroup. Co-governance is explicit at La Serre, Grand Hospice, and Park Ouest; open-volunteer stewardship at MONA and Bûûmparck Van Praet.
Spatial characteristics	How activities materialise spatially	Property type	Sites range from 600 m^2 (Espace Lessines) to 33,000 m^2 (Reset Brussels), spanning municipal buildings, former convents, industrial complexes, and vacant open land.
		Real estate typology	Four typologies recur: heritage/religious buildings (MONA and Grand Hospice), industrial/infrastructure sites (Park Ouest, La Serre, and Circularium), institutional buildings (Espace Lessines and La Crèche), and open land (Bûûmparck Van Praet). Office typology appears once (Reset Brussels, a former bank).
		Role in urban transformation	Three spatial clusters emerge: neighbourhood-scale infrastructures (600–2,600 m^2: Espace Lessines, MONA, La Serre, La Crèche, and Bûûmparck Van Praet) with strong local impact, large metropolitan hubs (15,000–30,000 m^2: Reset Brussels, Grand Hospice, Circularium, and Circle Park) with regional draw but reduced neighbourhood openness, and urban laboratories (Park Ouest, Bûûmparck Van Praet, and Grand Hospice) functioning as prefigurative planning tools.

Table 5. Synthesis of cross-case findings by analytical dimension.

Dimension	Analytical focus	Criteria (codes)	Synthesis of findings across the 10 cases
Temporal dimension	Duration and relation to future (re)developments	<2 years 2–5 years >5 years	Short-term (<2 years): Espace Lessines, La Crèche, Bûûmparck Van Praet (initial phase), and MONA (early stage) present high intensity but precarious conditions. Medium-term (2–5 years): Reset Brussels, Grand Hospice, Circle Park, Park Ouest, and Circularium have sufficient time to consolidate networks and public identity. Long-term (>5 years): La Serre (~7 years) and Circularium (if extended) function as stable, symbolically significant neighbourhood infrastructures.
		Pre-redevelopment/ transitional phase/long temporary infrastructure	Duration correlates with governance and eventual outcome. The two cases with the most developed co-governance/commons-oriented arrangements (La Serre and Park Ouest) are also the only two with confirmed structured transitions to permanent status (Community Land Trust and a permanent urban park, respectively). Shorter-lived, less co-governed cases (Espace Lessines and La Crèche) remain exposed to redevelopment uncertainty without a clear transition pathway.

6. Discussion

The CTOs examined in this study show that vacant real estate generates value through hybrid economies. Results (Table 5) illustrate place quality fostered through non-profit and community-based practices. Analysis shows that diverse economies (Gibson-Graham & Dombroski, 2020)—i.e., circular, creative, local, and sharing—overlap in outcomes of mixed activities in third places. Thus, CTOs combine all four economies identified in the literature on temporary use and temporary urbanism, producing diverse dimensions of value (Table 1).

The non-market value generated by CTOs takes forms that Klamer (2020) and Throsby (1999, 2000) theorised: access to affordable space, cultural participation, social care, environmental repair, mutual aid, and community capacity. Circularium, La Serre, and La Crèche generate material and environmental value through fabrication, repair, and short supply chains (indicators A1–A3 in Table 1). Reset Brussels and Grand Hospice deliver cultural and civic value through events and public programming (indicators B1–B4). MONA, Espace Lessines, and Bûûmparck Van Praet base value in everyday welfare infrastructures (indicators C1–C4). The challenge is to make these value dimensions visible to inform planning decisions as post-growth frameworks require (Chang & Wunderlich, 2025).

Another consideration concerns governance. Co-management arrangements in La Serre, Reset Brussels, and Grand Hospice; open participation in MONA and Park Ouest; and volunteer-based stewardship in Bûûmparck Van Praet show collective production and maintenance of shared resources outside both market and state

provision. Hence, CTOs reveal the value of vacant buildings as potential laboratories of democracy when governance structures are designed around the local community.

Critically, the reviewed literature frames creative and cultural economies as core drivers of urban vibrancy (Colomb, 2012; Honeck, 2017), but the Brussels cases reveal that the CTOs generating the deepest social and solidarity-based value are less visible and less institutionally supported than culturally spectacular hubs, such as Reset Brussels and Circle Park. Social media metrics, used as a proxy for external recognition, privilege creative economy indicators (B1–B4) over welfare indicators (C1–C5). Creative economies may accrue legitimacy through popularity, while care-based economies risk remaining under-recognised despite producing deep local value. In post-growth terms, this reveals a contradiction: The most socially necessary occupations may not automatically gain recognition.

Finally, temporality emerges as both a resource and a risk. As Ferreri (2021) and Bragaglia and Caruso (2022) highlighted, the ambivalence of temporary use enables experimentation while exposing users to precarity and instrumentalisation. From a post-growth perspective, Chang and Wunderlich (2025) argued that time is a constitutive dimension of urban life rather than a neutral background condition. The Brussels cases reflect this duality: Short-term occupations rapidly activate vacant spaces but remain vulnerable to redevelopment, whereas longer-term occupations consolidate communities, identities, and social value. The transition of La Serre to Community Land Trust Brussels and the permanence of Park Ouest as an urban park suggest that the greatest potential of CTOs lies not in extending temporariness but in creating pathways from temporary uses to permanent urban infrastructures.

7. Conclusion

This study examined how CTOs generate value beyond the market-based economy in Brussels. The literature on temporary use demonstrates that reusing vacant buildings relates to the circular, creative, local, and sharing economies. The 10 CTO cases show how they function as productive socio-spatial infrastructures, redistributing access to space, tools, knowledge, and cultural resources and enabling forms of value rooted in cooperation, reciprocity, care, and repair.

The circular, creative, sharing, and local economies are rooted in long-standing social initiatives, bottom-up practices, and collective projects. This study shows how, within temporary real estate reuse, such economies can be identified, compared, and related to specific forms of new place value. Hence, CTOs matter because they produce multiple value dimensions that market-oriented real estate development tends to overlook.

A key finding concerns the relationship between CTOs and their neighbourhoods. Some CTOs (MONA, Espace Lessines, and Bûûmparck Van Praet) are strongly embedded in local social life, providing learning, food, and social support. In contrast, metropolitan hubs (Reset Brussels and Circularium) operate at a larger scale and attract a wider public but are less open to the neighbourhood. This suggests that temporary use does not automatically generate local value; it does so when governance, programming, and accessibility are structured around community presence. Furthermore, CTOs mask inequalities because they do not address underlying drivers, such as speculative landholding and precarity. Moreover, the prominence of cultural and event-driven projects risks reinforcing a bias that values spectacular work over slow, care-based work.

This comparative analysis has limitations. Secondary data are uneven in depth. Only the case of La Serre was studied through direct observations and interviews, while the other nine cases relied on project documentation, websites, and social media. The sample of 10, while diverse, is not statistically representative of the 200+ occupations catalogued by the Guichet d'Occupation Temporaire. Finally, social media followers serve as a proxy for external recognition, but this conflates visibility with legitimacy and may reflect factors such as marketing, platform algorithms, and audience demographics unrelated to the value produced.

Despite its limitations, this study provides a scientific framework to investigate the added value of CTOs across multiple practices. As urban policies seek to address urban inequality, CTOs demonstrate that community-based temporary uses can generate place quality and multiple dimensions of value through hybrid economies. Empowering such practices can have direct implications for post-growth-oriented urban planning.

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Conflict of Interests

In this article, editorial decisions were undertaken by Libera Amenta (University of Naples Federico II).

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During the preparation of this work, the authors used ChatGPT 5.1 and Grammarly to improve the clarity of the English writing. After using these tools, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

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Radical Heritage: The Introduction of Urban Fallows and the Value of Cyclical Rest

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Abstract

In the context of climate breakdown and socio-economic precarity, this article introduces the novel concept of urban fallows as fertile grounds for rethinking urban heritage through the dynamic interplay of space, value, agency, and time. Building on our previous summer school on "Staying with the Fallows" within rural commons, we extend its ecological and temporal insights to the urban realm, proposing a typological framework for reimagining the dynamic cultural and material worth of underused urban fabric. Rather than conceiving disused buildings or sites as vacant voids awaiting reintegration into cycles of capital accumulation, this article reframes them as latent commons, as spatial and cultural reservoirs imbued with social memory, ecological potential, and the capacity to host alternative, speculative urban futures. Drawing from place-based investigations of urban assets across scales, this article explores how practices beyond conventional use such as situated care, custodial stewardship, and collective reimagining can serve as relational modes of heritage production through which urban value, agency, and temporal rhythms are reconfigured beyond logics of permanence, productivity, and exchange. These practices challenge dominant value logics tied to property, permanence, extraction, and productivity, offering alternative temporalities grounded in rest, repair, and relational use. The article asks whether the often static, narrow notion of heritage can be expanded to generate new value from our existing resources. This article draws on data collected from the Radical Heritage summer school, a collaborative, research-driven initiative. By embedding fallow thinking into practice, this project seeks to activate new value channels and cultivate new spatial sensibilities oriented towards long-term care, time, and cultural revaluation in the urban environment.

Keywords

adaptive reuse; agency; circularity; commons; ecology; heritage; time; urban fallows; value

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1. Introduction

Who decides what is worth preserving and who gets to define what counts as valuable? Heritage has long been governed by dominant narratives that privilege permanence, monumentality, and aesthetic distinction. These narratives converge within what Laurajane Smith terms the "authorised heritage discourse": a hegemonic framework that elevates material, monumental, and elite expressions of the past as the legitimate markers of cultural value (Smith, 2006). Emerging from Eurocentric traditions of knowledge, "authorised heritage discourse" constructs heritage as that which is "old, grand, monumental and aesthetically pleasing" (Smith, 2006, p. 11), thereby equating cultural value with permanence and monumentalising selective histories. Within this regime, decisions about what counts as heritage and who participates remain institutionally defined (Smith, 2006, p. 144). Operating within what Smith describes as broader "regimes of value," these discourses dictate what is conserved and who benefits, as well as who—and what—is systematically left out. In doing so, heritage is rendered static and monumental, detached from the everyday rhythms of use, decay, and renewal.

1.1. From Static to Dynamic Heritage

In contrast, recent scholarship has sought to move beyond this authorised discourse by conceptualising heritage as an active and relational process. Lowenthal (1985) describes heritage as a constructed and selective process that helps societies make sense of the present through reinterpretations of the past. Building on this relational understanding, Fouseki (2022) advances what she terms the heritage dynamism framework, which conceptualises heritage through the lens of complexity and systems thinking. At the core, this framework views heritage as a dynamic and complex socio-cultural practice whose emergence, transformation, and continuity depend on the interconnections among materials, values, skills, senses, time, place, and resources. "The underpinning premise of this approach," she writes, "is that heritage is a dynamic and complex socio-cultural practice" whose forms "emerge, shift, transform, disappear or revive" depending on how elements are "made, sustained, or dissolved" (Fouseki, 2022, p. 16).

Fouseki (2022) positions heritage as a systemic process of continual negotiation among interdependent elements and agents; as she writes, "the relationships between the elements are non-linear, with multiple causalities leading to unanticipated outputs. Events can be sudden, of short duration or long-term; in most cases they are unpredictable" (Fouseki, 2022, p. 18).

1.2. From Dynamic to Radical Heritage

Extending Fouseki's model, this article introduces the concept of *radical heritage* in an effort to move from observing this complexity to redistributing value, care, and agency across time, actors, and place. Where heritage dynamism captures systemic interdependence, radical heritage foregrounds fallow thinking: It seeks to re-value the overlooked, re-generate the disused, and re-distribute heritage resources beyond institutional hierarchies. It resists static preservation in favour of relational, adaptive, and situated practices of care that include the marginal, the ephemeral, and the non-human.

In this sense, radical heritage aligns with what David Harvey calls "small heritages"—ordinary, plural, and lived practices that sustain identity through everyday rituals, gestures, and memories (Harvey, 2001). These

practices often unfold in spaces deemed unworthy, unproductive, or invisible within the official city—what this article calls urban fallows. In an age marked by climate emergency, forced migration, and socio-economic precarity, the question is no longer merely what to preserve but whose futures are sustained through acts of care and regeneration.

1.3. From Radical Heritage to Fallow Thinking

This article builds off our previous summer school "Staying with the Fallows," which established the groundwork for the inclusion of fallow thinking as a necessary ontological and epistemological reorientation for the practice of architecture (from anthropocentric to eco-centric) and proposed the addition of a new stage to the RIBA Plan of Work, stage ∞, a cyclical stage in the design process where the earth is the underlying client, user, and site for every project.

Fallow is understood here as a condition of active rest, suggesting stillness and renewal can coexist through mindful engagement rather than absence, depletion, or withdrawal. In agrarian terms, fallow indicates a deliberate and temporary suspension of use to enable regeneration (most notably of soil), rather than abandonment. We retain this core meaning but extend it beyond cultivation to describe urban conditions in which space is held, paused, or loosened from intensive productivity such that ecological, material, social, and cultural processes can re-form. In this article, urban fallow does not have a single property status, but a relational condition of active rest produced by varying degrees of intention, governance, and more-than-human inclusion. This includes spaces that are deliberately held in reserve, spaces unintentionally left behind, and small urban interstices that nonetheless perform regenerative functions.

Crucially, we argue that the act of fallowing can be understood as a mode of care; an ethic of allowing time, repair, and non-human agency to operate rather than an absence of value or attention. Rest, then, is not a break from being-in-the-world or being void of value but a renewal of how one dwells within it (Heidegger, 1962). Lefebvre (2004) might describe this as the everyday rhythm of the body and city: moments of intense production followed by active reorientation; an opportunity to recalibrate one's relations as a process of attunement, to complete a full cycle (Figure 1). Fallowing, then, is the intentional act of allowing space to regenerate through re-earthed value in cyclical rest with care, attention, and time. This article therefore asks:

- What if the most fertile spaces in our cities are the ones left fallow?
- What if fallowing operates as a cyclical mode of valuation?
- What if heritage is not something to preserve, but something to practice together?

Building on these provocations, we reinterpret urban fallows as latent commons (Petrescu et al., 2020); spaces of civic potential, ecological regeneration, and social imagination. The article argues for a shift in how we perceive, value, and care for the built environment where a lack of visible activity conceals deep ecological, material and social processes. This reconceptualisation positions heritage as a living, collective practice that entangles material, ecological, and social systems in cycles of decay and renewal, revealing new modes of stewardship and responsibility toward our shared spaces and resources. This article extends the framework of fallow thinking toward a typology of urban fallows—defined by the interrelations of space, time, value, and agency.

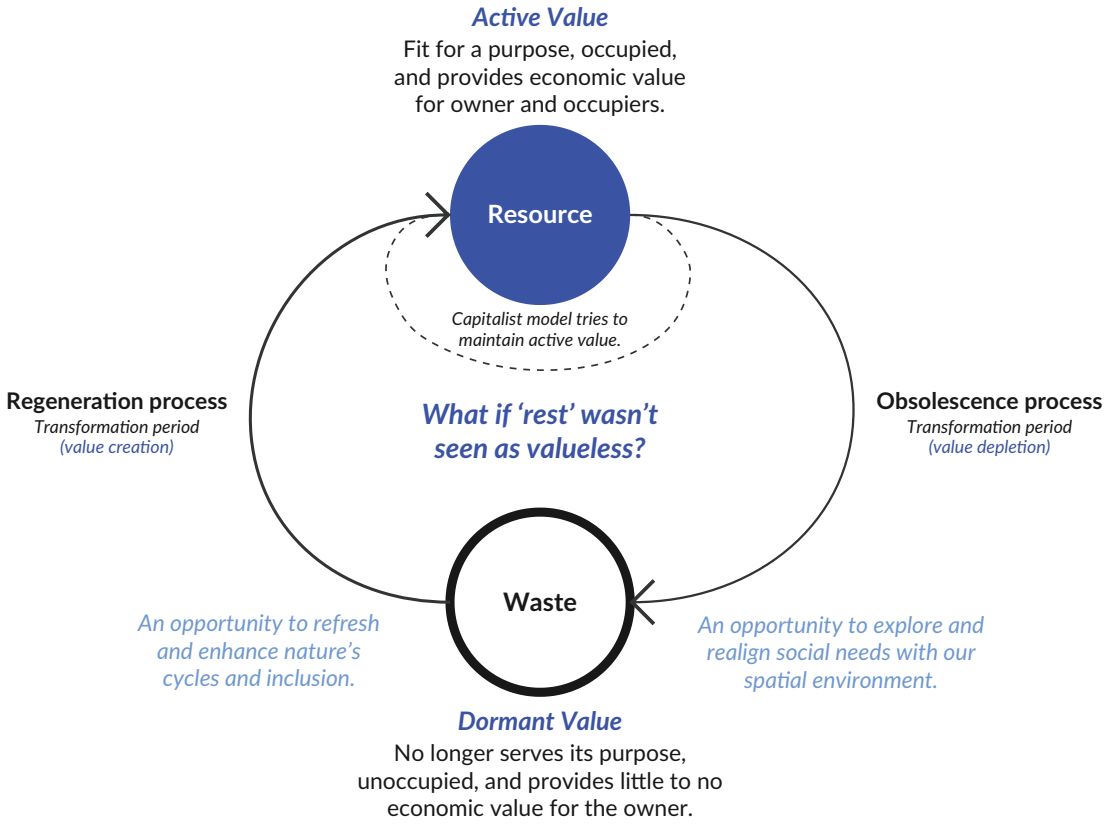


Figure 1. Disrupting value assumptions within the conventional resource (active) and waste (dormant) value cycle for spatial assets.

2. Towards an Urban Fallow Typology

2.1. Typology

Typology has a long history in architectural discourse conventionally serving as a method of classification or reasoning; a way of discerning the recurrent structures, spatial logics, and social meanings embedded within architectural built forms. Rossi (1982) defined typology as "a logical principle that is prior to form," positioning it as a bridge between architecture and history. Here, typology is both analytic and projective; it decodes the sedimented logics of buildings and provides a foundation for new building designs grounded in continuity (Caniggia & Maffei, 2001). However, such approaches have been criticised for excluding indeterminate and informal spaces (c.f. de Solà-Morales Rubió, 1995).

Modernism's attempts to stabilise typologies have since evolved towards more dynamic, context-based models. Allen (1999) reframes typology as a field of relations, suggesting a systems-based approach, in which architecture is infrastructural and operative rather than morphological. Similarly, Habraken's open building approach (Habraken, 1998) conceives buildings as stratified systems of use, control, and time, positioning typology as an open framework capable of accommodating social, economic, and ecological change. Brand (1994) further develops this approach through his concept of shearing layers, describing the built environment as an evolving assemblage. Typology here has shifted from a static taxonomy to a generative understanding of how architecture evolves and adapts in response to contextual conditions.

More recent critiques emphasise typology as relational; "spatial products" that are constructed through interdependent planetary conditions (c.f. Brenner & Schmid, 2015; Easterling, 2014). Others foreground participation, temporality, and user-responsiveness, emphasising indeterminacy as a productive condition (Petrescu et al., 2020; Till & Schneider, 2005). Our definition of a typology for urban fallows builds on this transition, extending typological thinking beyond the building and into the urban field of latency and potential, where the objects of study are not formal buildings but informal, temporal, and evolving spatial conditions. Here, typology is not a category of object, but a condition of becoming—a typological field defined by how space, time, value, and agency interact. It represents conceptual novelty, concerned not with stability but with transformability, not with form but relation, and not with authorship but stewardship. Table 1 outlines key conceptual differences between the traditional approach to typology and this expanded interpretation.

Table 1. Comparison of key aspects of traditional typology and urban fallows application.

Traditional Typology	Typology of Urban Fallows
Defines what a building is	Explores what a space could become
Concerned with form and permanence	Concerned with process and transformation
Rooted in formal classification	Rooted in relational mapping
Centres on architectural authorship	Centres on collective agency and care
Values historical continuity	Values ecological and civic regeneration

The fallow's indeterminacy allows plural forms of agency: informal reuse, ecological succession, community care, and more-than-human habitation. In line with Stavrides (2016), this expands typological reasoning toward a commons-oriented paradigm where types are understood as a spatial, collective, and generative condition; fields of shared practice rather than objects of ownership. This repositioning of typology aligns with our regenerative architectural thinking and our reconceptualisation of heritage as a living, collective practice. By tracing the interrelations of space, time, value, and agency, we operationalise typology at the intersection of ecological thinking and critical heritage studies to demonstrate how urban fallow is not outside the heritage discourse but constitutive of it—as a space of experimentation, collective imagination, and environmental care.

2.2. Defining the Space, Time, Value, and Agency

The typology of the urban fallow emerges through the interrelation of space, time, value, and agency—four dimensions that collectively articulate the latent potential of fallowness. The framework approaches these dimensions as mutually constitutive forces in continual exchange: The spatial openness or enclosure of a site influences its temporal rhythm; temporal duration reframes how value is assigned or withheld; and value, in turn, is mediated by forms of agency, human and more-than-human, that engage a site. It is within these shifting configurations that fallowness reveals itself not in absence, but as a generative condition of transformation, where social, ecological, and cultural processes intersect. Each of these four aspects is explored in the sections that follow, both as an analytical lens and as a means of reimagining how urban environments might be cared for, reactivated, and renewed.

2.2.1. Space & Time: Rhythms, Cycles, and Urban Fallow

Urban space, as Lefebvre (1991) argues, is socially produced and a continuously contested field. Its classification as resource or waste is neither natural nor stable; it is the outcome of dynamic socio-spatial processes, constantly rewritten through material, ecological, and cultural practices. As Degen (2018) observes, the process of urban transformation is a "fragile and dynamic process rather than a linear chronological continuum" (p. 16). Urban change unfolds through non-linear temporalities, oscillating between construction, decay, and renewal, rather than following a singular trajectory of progress. Within this flux, urban fallows act as active spatio-temporal agents of transformation.

Edensor (2005) and Gregson and Crang (2015) extend this understanding by describing urban change as lived through multiple and overlapping temporalities, in which what is perceived as resource or waste continually shifts in response to social, political, and ecological conditions. A space once valued for production may, through periods of disuse or suspension, become categorised as waste—only to be reactivated under new circumstances. This instability disturbs dominant narratives of progress and decay, revealing instead a cyclical urban metabolism in which material, meaning, and value are continually redistributed. Urban fallows occupy a critical role within this metabolism: They hold the capacity to transform, to be both surplus and potential, residue and reserve.

This condition aligns with Anderson's (2009) concept of dynamic simultaneity, where the urban is always in the process of becoming. Urban space is thus unfinished and processual, continually reshaped through emerging relations between humans, materials, and non-human entities. Within this frame, fallow spaces function as thresholds; temporarily open conditions that invite new spatial practices, ecological processes, and collective imaginaries to take hold. Lefebvre's (2004) rhythmanalysis frames this spatio-temporal condition as one structured by rhythmic cycles. The urban fallow embodies these alternating rhythms; moments of pause that are still active, hosting ecological repair, material decomposition, and informal social practices. When urban space is approached through rhythm and simultaneity, the resource–waste binary gives way to a continuum of states, where sites shift between neglect and renewal, toxicity and fertility, dereliction and reuse, in response to intersecting temporal, social, and ecological rhythms.

Recognising this fluidity and relational condition reframes our perception of waste as a temporary phase rather than an end. It becomes an administrative fiction that can be countered through acts of revaluation—by making visible the material stocks, ecological functions, and affective ties that persist within apparently abandoned places (c.f. de Solà-Morales Rubió, 1995; Edensor, 2005). Through this lens, the urban fallow as space is latent potential, embodying active rest: a spatial condition where renewal, memory, and material agency coexist in cyclical, non-linear rhythms of urban becoming. Within the typology of urban fallows, space and time are therefore inseparable and mutually constitutive: Space refers to the physical and relational conditions shaping morphology and access, while time captures rhythms of use, suspension, stability, and change.

2.2.2. Value

The temporal rhythms of activity and pause in the urban fallow inevitably bring questions of value. Within capitalist urbanism, value is closely tied to productivity and exchange; land left idle is interpreted as a suspension of worth (Kim, 2016). Within such a framework, unproductive time and vacant land can be

casted as non-value—as interruptions in the circulation of capital. This narrow framing obscures the latent potential of fallow conditions. Cumbers (2019) describes waste as value in waiting, excluded from immediate circuits of capital yet tethered to future possibility.

The urban fallow occupies this same ambiguous terrain: excluded from formal economies yet charged with deferred potential. Andres and Zhang (2020) call for an alternative understanding of fallowing as a moment of transition, one that interrupts the ideology of perpetual building and unbuilding and opens space for reflection, repair, and ecological renewal. Value, in this sense, is no longer tied to acceleration but to regeneration—to the ethics of care and the capacity to sustain life across temporal scales.

This relational understanding of value resonates with heritage theory, where value is increasingly conceived not as inherent but as emergent. Harrison (2012) describes heritage as a dynamic ontology of relations between people, materials, and environments—fluid networks of attachment and meaning that evolve through acts of care, maintenance, and memory. Within this frame, non-value does not signal absence but potentiality: a phase in which social, ecological, and affective values are reconstituted through decay, renewal, and reassembly.

The typology of the urban fallow thus reframes value as plural and dynamic, beyond the economic commodification of the site to include social, cultural, and environmental worth, each operating across different temporal and spatial registers. Fallow becomes a site of redistribution, where disassembly, latency, and regeneration open possibilities for new forms of collective and ecological worth. It defines how the site is positioned within systems of exchange and care and how those valuations shift over time.

2.2.3. Agency

Agency within the urban fallow is distributed and relational, emerging through interactions among people, materials, institutions, and ecologies. Drawing on assemblage and actor-network theories, agency is understood as the capacity to affect and be affected rather than as command or control (DeLanda, 2006; Latour, 2007). The urban fallow embodies this distributed condition. It is not an inert residue awaiting human direction but an active assemblage, continually reorganising through natural succession, informal use, and material decay.

This expanded understanding of agency aligns with Latour's parliament of things (1996) and Haraway's sympoiesis (2016), both of which conceive politics and practice as shared acts of world-making, where humans and non-humans co-produce conditions of existence. Similarly, Albrecht's concept of sumbiocracy (2019) articulates an ethics of governance founded on mutual interdependence, an ecological democracy where every being holds a stake in the collective good. Within this framework, agency becomes a form of relational stewardship rather than ownership: a responsibility diffused across multiple actors who sustain, rather than exploit, the environments they inhabit. In contrast to agency theory, which assumes self-interest obligation as the basis of human behaviour, stewardship theory foregrounds intrinsic motivation, cooperation, and collective purpose (Davis et al., 1997; Van Puyvelde et al., 2012). As McCuddy and Pirie (2007) observe, the agent acts on behalf of shareholders, whereas the steward acts for stakeholders for the integrity and continuity of the system as a whole.

Applied to the urban fallow, stewardship reframes agency as an ethic of care. Diverse human and non-human agents become part of a wider ecology of action where agency is co-produced through maintenance, observation, and adaptive response. Within this stewardship framework, power, responsibility, and creativity are distributed across social, political, and ecological networks.

2.3. A Working Framework

The typology of urban fallows diagram (Figure 2) visualises how the interrelations of space and time generate distinct yet interconnected conditions of fallowness. The horizontal axis positions space along a continuum from enclosed to open, and the vertical axis positions time from ephemeral to enduring. This reveals the potential for four principal typological tendencies, with each quadrant capturing a characteristic configuration of value and agency. They are defined as a typology of relations and transitions, by a fluid negotiation between space (morphology and access), time (duration and rhythm), value (economic, social, or regenerative), and agency (who or what acts and cares).

Read relationally, the diagram demonstrates that fallows are not fixed categories but dynamic states of transition, capable of evolving across quadrants as social, environmental, and economic forces shift. Typology is reframed as a process-oriented tool for mapping latent urban spaces and their transformation

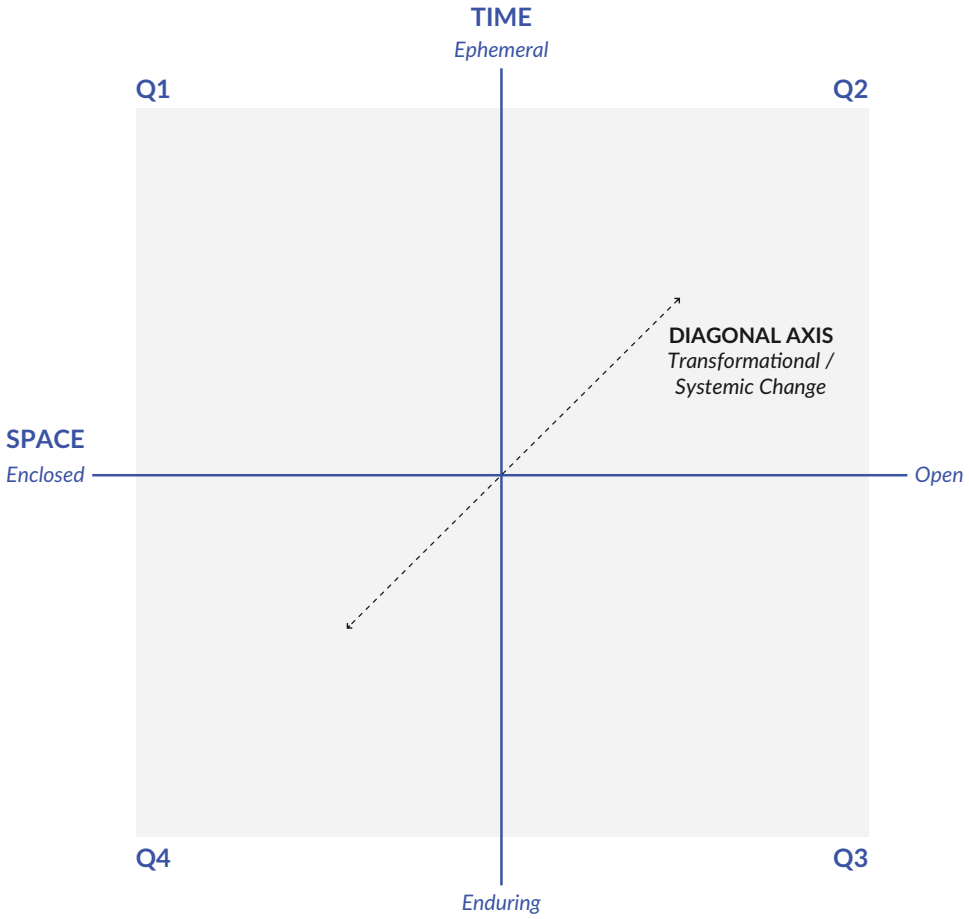


Figure 2. Relational framework mapping the interaction of space, time, value, and agency.

from neglect into sites of potential, care, and renewal. Urban fallows are seen as dynamic, adaptive fields of potential; laboratories for rethinking how cities rest, regenerate, and reimagine their futures.

3. Research Methodology

This research adopted a qualitative, constructivist approach grounded in the principles of circular, regenerative, and ecological urbanism. It recognises that urban systems are dynamic, relational, and co-constructed by diverse human and non-human actors. The study focused on understanding how meanings, values, and practices surrounding urban sustainability and heritage emerge, interact, and transform within specific contexts. Knowledge is therefore treated as situated and interpretive, shaped through reciprocal relationships between researcher and environment. The overall approach was exploratory and iterative, designed to move from breadth to depth.

The study used the format of an intense international research-focused summer school to gather spatial data from urban environments in five countries—Loughborough (UK), Recife (Brazil), Pune (India), Tokyo (Japan), and Belgrade (Serbia). The study drew on empirical observations from five urban contexts across three continents, developed through a collaborative research initiative involving local university partners in each location. These contexts span distinct governance, development pressures, and socio-environmental conditions, which provided a comparative ground for examining urban fallowness as a relational condition. Within each city, multiple fallow sites were identified and documented, resulting in a total dataset of 124 sites in Phase 1 and 56 sites in Phase 2.

The study was conducted in two phases. Researchers were collectively briefed in advance on the study's aims, methods, and tools, with piloted examples used to align practice and ensure consistency. The first, exploratory phase used desktop research, site observations, and local knowledge to conduct a rapid survey of fallow spaces. This "fast scan" documented a broad range of potential sites using a standardised Microsoft online form (Table 2, Phase 1) to help assure consistency and comparability with the data gathered. Sites were recorded in small groups to support consistency and reduce individual bias. Across the five contexts, 124 sites were logged, followed by cross-site discussions to clarify uncertainties and harmonise interpretation.

The second, sequential explanatory phase involved a smaller, more purposeful sample of 56 sites to enable deeper, context-rich analysis (Creswell & Plano Clark, 2011). Selection criteria included diversity of spaces, signs of interaction, ecological richness, and ownership. A second structured online form (Table 2, Phase 2) guided detailed data collection while maintaining consistency across locations. Throughout both phases, the approach remained reflexive and relational.

The analytical process followed a qualitative and interpretive framework, aligned with the redefinition of typology as an interplay of space, time, value, and agency. The data, organised within a structured database, were consolidated and cleaned to ensure consistency, depth, and theoretical alignment. This involved the removal of incomplete or duplicate entries, standardising of formats, and retaining all descriptive metadata to maintain traceability and compatibility.

The qualitative data underwent systematic coding using a combination of open and axial coding to ensure linguistic and conceptual consistency. Initially, the data were labelled according to emergent ideas and

Table 2. Entry fields for online data collection form.

Phase	Field	Prompt/Guiding Question
1	Entry ID	Unique label for each space based on country.
	Type of Space	Building, in-between or open space, infrastructure, etc.
	Location	Google Maps pin.
	Current Condition	Vacant, semi-active, maintained, overgrown, damaged, abandoned, etc.
	Signs of Interaction	Visible traces of human/non-human use.
	Quick Value Hint	Social, cultural, ecological, and economic value.
2	Entry ID	Unique label for each space based on country.
	Spatial Unit Name	Provide a short name/label.
	Scale/Extent	Approximate size and unit scale. Size: small, medium, large; Uni scale: building, block, neighbourhood.
	Material/Physical State	Materials & structures. How do they behave over time?
	History & Value States	What was this place before? How has it transformed? How has its value shifted?
	Political/Economic Context	Which wider forces shaped it?
	Accessibility/Governance	Access: open, closed, restricted; Status: legal or contested; Managed?
	Social/Cultural Value	Identity, shared memory, traditions, symbolic meanings. Who benefits? Who is excluded?
	Economic/Functional Value	Use, reuse, adaptability, informal economies, local jobs.
	Ecological Value	What current ecological services does the site support?
	Commons/Stewardship	Who maintains it (formal/informal, human/more-than-human)?
	Future Potential	What could this become? Consider community visions, design ideas, different forms of new value.

observations, then grouped into broader thematic categories reflecting the four analytical dimensions. This situated approach allowed for cross geo-contextual comparisons and the exploration of alignments and misalignments between value types. The relationships between the four attributes were mapped to reveal patterns in the data; this enabled "types" of fallows to emerge as clustered spatial examples plotted on the relational framework presented above.

3.1. Coding Procedure and Analytical Synthesis

Coding was grounded in direct, observable inputs, specifically: type of space, current condition, visible signs of interaction, and quick value hints. Each of these inputs was supported by predefined code families, rationales, and operational definitions, which guided consistent application across all locations.

Sites were coded according to their primary spatial unit using the Type of Space field based on observable physical and functional characteristics. Codes were grouped into four morphological families—defined,

layered, residual, and fragmented—reflecting spatial structure and origin. Defined forms referred to intact architectural units; layered forms captured overlapping infrastructures, ecologies, or uses; residual forms described interstitial spaces produced through planning or development; and fragmented forms referred to discontinuous or unbuilt ground conditions. These categories emerged inductively through aggregation rather than abstract formal judgement.

Temporal attributes were derived from the Current Condition field, capturing visible states of use, care, or neglect at the time of observation. Codes ranged from active and maintained to vacant, abandoned, damaged, or overgrown, with additional categories identifying transitional conditions such as temporary vacancy or renovation. Together, these codes were used to interpret temporal rhythms, distinguishing short-term pauses, managed dormancy, and longer-term ecological or institutional suspension.

Agency was operationalised through the Signs of Interaction field, recording visible traces of human, non-human, material, and institutional action; including graffiti or furniture traces, footpaths and wear patterns, vegetation colonisation, material decay, and signs of animal presence. Value was coded using the Quick Value Hint field, identifying social, cultural, economic, and ecological domains based on observable cues such as gathering, symbolic traces, market activity, or ecological services.

4. Data Analysis/Discussion

4.1. Four Attributes of Urban Fallows

4.1.1. Space

Space is the most materially expressive attribute of fallowness and offers spatial evidence into morphology, access and governance, surface character, and functional traces. Spatial morphology data showed that defined forms constitute 54.03% of observed sites, followed by residual (25%), layered (13.71%), and fragmented (7.26%) configurations (Figure 3). These distributions indicate that although a majority of fallows retain a coherent geometric or structural legibility, nearly one-third (32.97%) display residual or fragmented morphologies that destabilise formal boundaries and afford conditions for spatial adaptation and ecological emergence.

Observations such as “a clear rectilinear structure,” “leftover strips of land,” “patchwork surface conditions,” and “interior spaces made unusable” reveal how spatial coherence and fragmentation shape perception and activation; defined forms often signal containment and latent order, whereas fragmented ones often support ecological succession and informal reappropriation. This tendency is reinforced by surface character and material conditions, with notes such as “cracked asphalt” and “waterlogged depressions” evidencing how decay and uneven ground textures contribute to the performative potential of fallow spaces. The presence of ecological landscapes (8.06%), vacant plots (7.26%), and in-between spaces (12.9%) further demonstrates that spatial looseness and material deterioration act as generative affordances, producing ecologies of adaptation, permeability, and informal occupation that challenge conventional hierarchies of urban order.

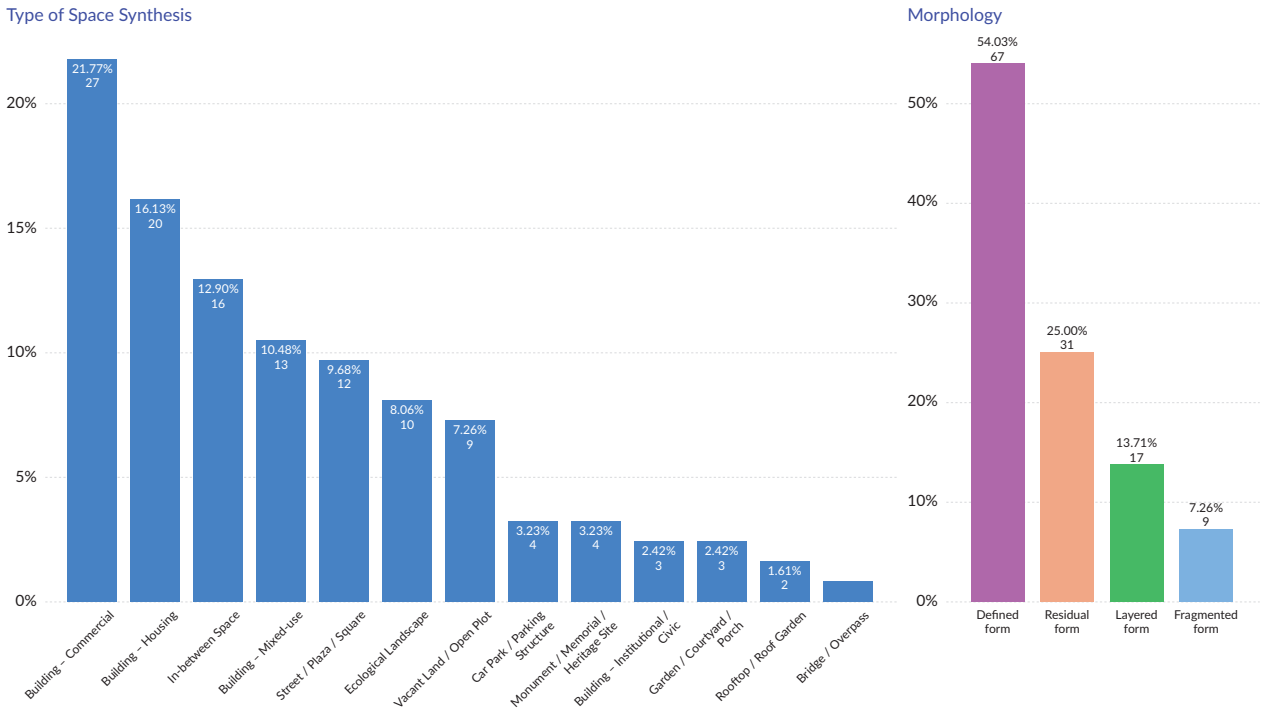


Figure 3. Space and morphology breakdown.

The Type of Space synthesis data reinforce this complexity. The largest share of fallows occurs within commercial (21.77%) and housing (16.13%) contexts, followed by in-between spaces (12.9%), mixed-use buildings (10.48%), and street or plaza conditions (9.68%). This distribution evidences that fallowness is embedded across active urban fabrics, occupying interstitial and transitional thresholds within everyday environments. The presence of ecological landscapes (8.06%) and vacant plots (7.26%) extends the spatial ecology of fallowness into more open, non-programmed terrains where material and ecological processes predominate.

Accessibility and Governance revealed codes such as fully accessible, partially accessible, closed/inaccessible, and ambiguous access, demonstrating that fallowness is profoundly shaped by permeability. Observations like "open access," "the pathways are accessible," "closed, most likely locked," and "status uncertain" highlight that spatial openness is both a physical and a social condition which can regulate behaviour through spatial cues rather than explicit rules. Functional and behavioural traces, such as recreational use, circulation, seclusion, and incidental use, demonstrate that fallows often host informal, low-intensity activities even when not formally programmed. Observations referencing "people cutting across the site," "sitting on makeshift benches," or "children using abandoned structures for play" show that space is performative by enabling contingent forms of use that fall outside conventional planning categories.

4.1.2. Time

Time distinguishes between temporal status, e.g., active, dormant, idle, suspended, awaiting development, and temporal rhythms, e.g., cyclical use, seasonal change, slow change, abrupt change. This dual structure captures fallowness as both a state and a process. Temporal status of the data shows how fallows oscillate between phases of activity, inactivity, and uncertain futures. For instance, "idle but maintained," "dormant

waiting for redevelopment," and "temporarily fenced during construction phase" differentiate between forms of inactivity that appear similar on the surface but are produced by different logics. These distinctions highlight the intentionality behind inactivity, e.g., dormancy (market-driven), managed (institutional), or emergent (ecological). This conceptual distinction becomes visible in the distribution of temporal categories. As shown in Figure 4, over one-third of sites (35.15%) were coded as vacant, representing spaces in extended inactivity yet held within frameworks of ownership or speculation. This category exemplifies institutional dormancy in which time is suspended by anticipation. Meanwhile, semi-active (14.06%) and maintained (12.5%) sites illustrate managed or curated fallowness, where intermittent or minimal care sustains the site in a ready state, delaying decline but postponing transformation.

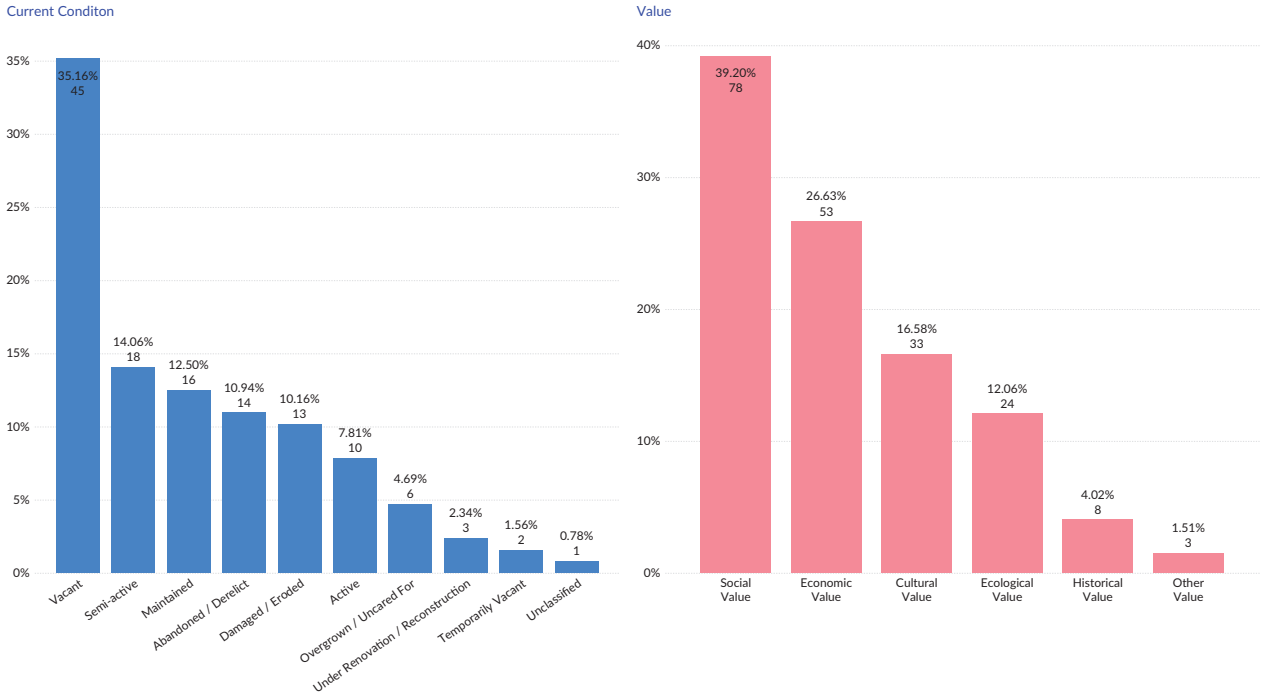


Figure 4. Percentage distribution of urban fallow conditions.

Temporal rhythms introduce a second layer of interpretation, referencing cyclical conditions as "seasonal flooding," "vegetation that returns each year," "weekend-only presence," and "daytime passage but nighttime emptiness," which show that fallows possess temporalities that oscillate across daily, seasonal, and multi-year scales. This is reflected in categories such as abandoned/derelict (10.94%) and damaged/eroded (10.16%), which reveal emergent temporalities where decay and ecological succession replace human oversight, bringing to the fore the agency of non-human processes.

At the lower end of the spectrum, categories such as under renovation/reconstruction (2.34%) and temporarily vacant (1.56%) indicate short-cycle transitions within the broader temporal ecology of the landscape—brief interruptions that punctuate longer rhythms of abandonment or redevelopment. These smaller yet significant states introduce the notion of temporal porosity, where sites move fluidly between use and suspension.

These rhythms determine whether fallows stabilise (institutional), transform (ecological), or fluctuate (civic). For example, cyclical human presence—coded as "sporadic use" or "periodic community activity"—signals a civic life even if the site is empty much of the time. Temporal ambiguity produced codes like "uncertain future"

and “indeterminate duration” that highlight temporal uncertainty; however, it reveals that the ambiguity is generative, creating opportunities for appropriation, ecological succession, or speculative delay.

4.1.3. Value

The value dimension opens up a multi-layered insight into how fallows are valued and devalued across economic, social, and ecological registers. Economic value appears primarily through codes such as land speculation, redevelopment potential, investment risk, and economic latency through supporting observations such as “held by developer awaiting approval” or “prime location” which demonstrate that economic value in fallows is often prospective rather than realised. As seen in Figure 4, economic value accounts for approximately 26.6% of all coded observations, emerging as a significant but not dominant register. This suggests that while speculative potential remains an important frame, fallows are not solely defined by their market logic.

By contrast, social value dominates the dataset (39.2%), reflecting the everyday engagement that residents and communities maintain with these spaces. Social value is captured in codes such as community utility, safety perceptions, informal use value, and public enjoyment, and is exemplified in observations such as “elderly residents use the bench here,” “a known shortcut for schoolchildren,” and “used as a social spill-out space”—showing that fallow space can serve vital social functions.

The chord diagram (Figure 5) further shows that social value most frequently overlaps with “vacant” (27.5%) or “semi-active” (17.5%) conditions, illustrating that social use thrives precisely where formal activity withdraws. This is bolstered through cultural and symbolic values like historic resonance, memory traces, identity anchors,

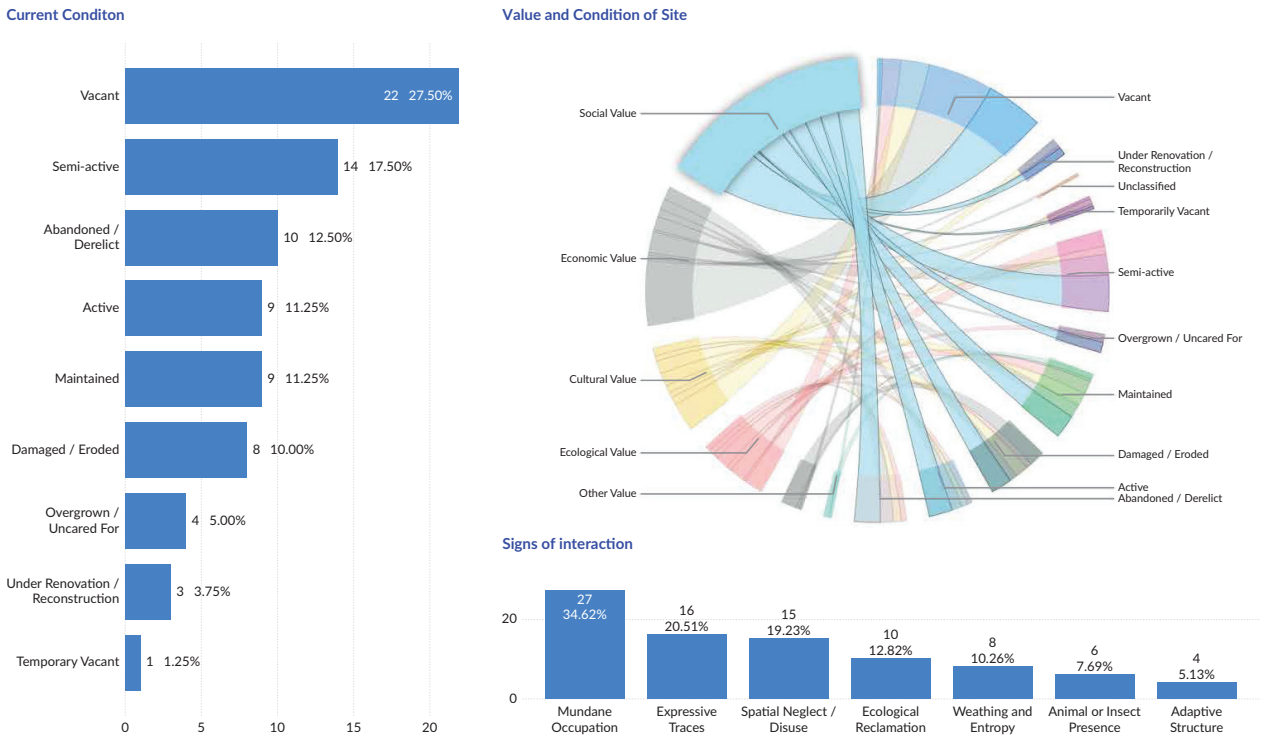


Figure 5. Relational diagram between social value, conditions, and use.

and symbolic neglect, illustrating how urban fallows function as repositories of memory and identity, opposed to simply spatial voids. These values were captured by, e.g., "once a factory" and "the old stadium wall still stands," positioning fallows as evolving cultural artefacts rather than failures of the urban system.

Ecological value is reflected in biodiversity pockets, ecological refuge, soil remediation, hydrological value, and spontaneous succession. Observations including "pollinator activity," "self-seeded trees," "wetland formation in depressions," and "proliferation of moss and lichen" show ecological value not as a by-product but as a central dimension of fallowness embedded within urban metabolisms.

4.1.4. Agency

Agency offers insight into modes of action, presence, and influence across human and non-human actors, revealing how fallow sites operate as layered assemblages of interaction. The urban fallow data show that human agency accounts for nearly half of all recorded instances (48.39%), predominantly expressed through mundane occupation (29.03%) and spatial neglect or disuse (25%). This category encompasses both intentional acts—such as murals, installations, and spatial modifications—and behavioural traces, including improvised paths, scattered litter, rearranged objects, and recurring patterns of movement or lingering. These categories show how urban fallows support informal occupation.

Non-human agency, representing 25% of the dataset, is most evident through ecological reclamation (16.94%) and animal or insect presence (8.06%), signalling that fallows operate as multispecies habitats shaped by autonomous ecological processes. Here, it is evidenced through vegetation expansion, animal foraging, pollinator presence, root displacement, and decomposition processes. The vegetation, animals, and microorganisms engage in forms of material labour that actively remake the site—cracking pavements through root expansion, softening hard surfaces through colonisation, and animating derelict structures with cycles of nesting, foraging, and decay which alter the morphology and function of fallows.

The material agency accounts for 8.87% of all recorded forms of agency, and it highlights processes of decay and transformation that shape fallow atmospheres (e.g., rusting metal, degrading concrete, pooling water, shifting soil). These processes are not passive; they direct subsequent ecological colonisation and influence perceptions of risk or possibility. In contrast, institutional agency appears through codes like custodial maintenance, surveillance, administrative delay, and regulatory intervention. The relative scarcity of adaptive structural interventions (3.23%) and the high proportion of no active engagement (25%) further underscore how institutional and environmental agencies act indirectly: through regulation, deferred maintenance, or climatic forces. Lastly, environmental agency is captured in wind exposure, flooding, heat accumulation, and shade patterns, expanding our understanding of fallows as climatic assemblages. These environmental forces shape use patterns, vegetation growth, and material decay.

4.2. Fallow Typologies

Typology here functions not as a taxonomy of forms but as a relational framework mapping how the four attributes dynamically interact to generate distinct conditions of urban fallowness. While each quadrant can be understood as a typological ecology (Figure 6), they are defined as a typology of relations and transitions, by a fluid negotiation between attributes. This section offers characterisations for each type.

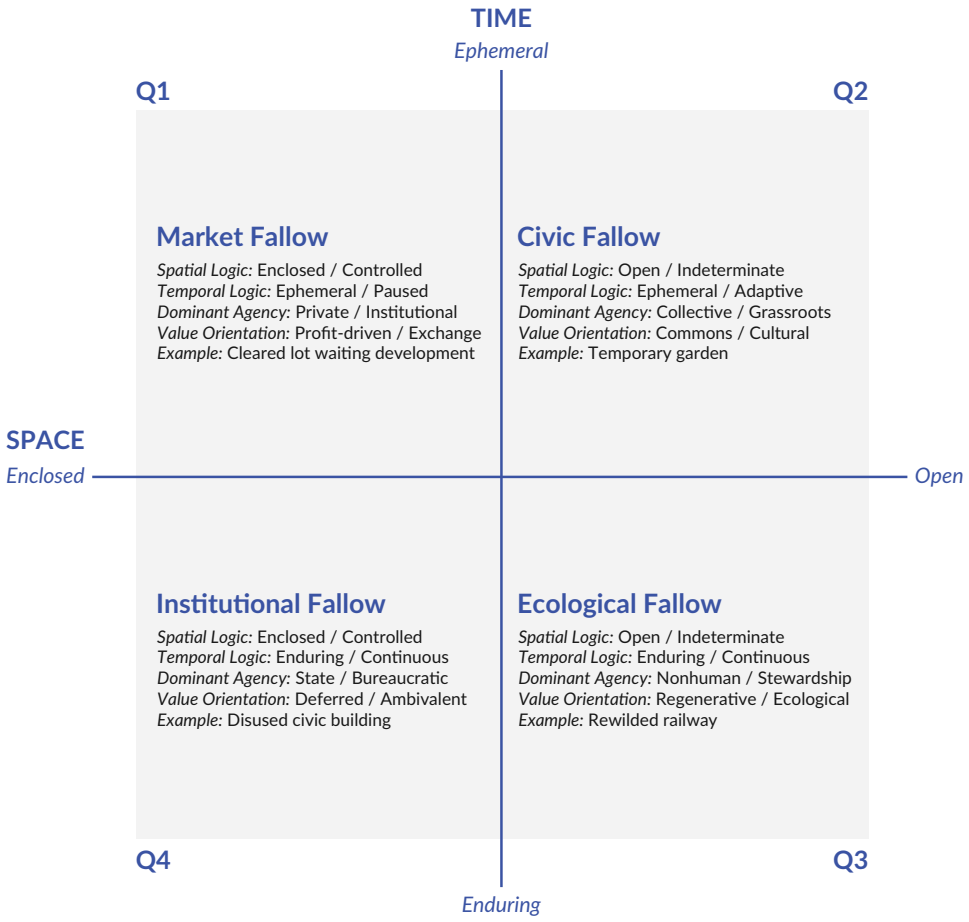


Figure 6. Fallow types outlined on the relational framework.

4.2.1. Market Fallows

Spaces that fall in quadrant one, labelled market fallow, are typically intentionally kept empty for economic or planning purposes. The data expose this latent condition where 46.3% of sites are classified as vacant and a further 14.8% as semi-active, indicating that more than half of the recorded sites remain in a controlled state of inactivity. The large share of vacant and semi-active sites signals an urban landscape of managed latency rather than abandonment. The high presence of maintained sites reinforces that these spaces are not left to decay but are strategically preserved in anticipation of market shifts (Figure 7). The fallow condition is an "engineered latency" serving market speculation rather than regeneration. Spatially, they are observed as enclosed, restricted, or controlled, with a defined and often maintained building.

The clearly visible restrictions assert ownership as a spatial claim and point towards a condition of curated inactivity, signalling the site is not abandoned but paused within an economic cycle. Temporal rhythm is dictated by planning requirements, market readiness, or investor expectation. Spaces here are rarely observed as "damaged," "overgrown," or "uncared for," as the fallow condition is stabilised through periodic maintenance. As such, value here is overwhelmingly dominated by projected economic value, suppressing broader social and ecological value, and thus, these fallows act as spaces of suspended potential, a controlled pause within the formal cycle of urban production.

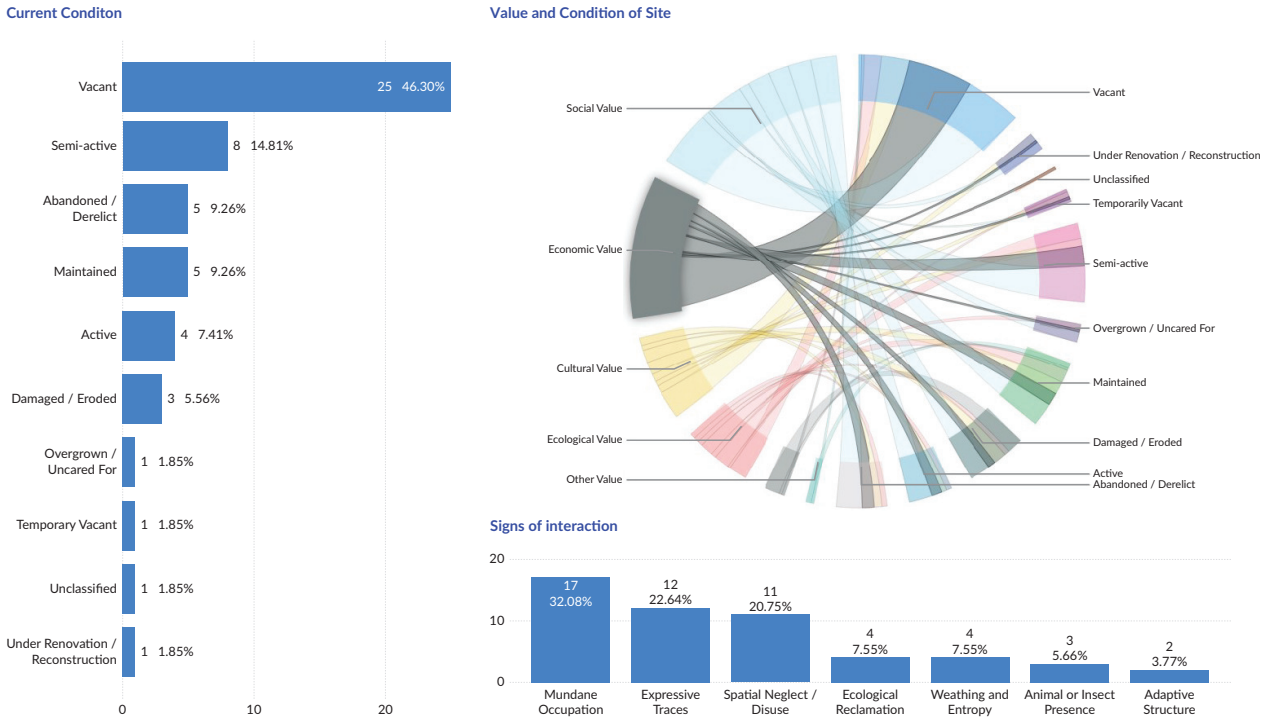


Figure 7. Fallows of engineered latency.

4.2.2. Civic Fallows

In contrast to market fallows, quadrant two, civic fallows, are marked by the convergence of spatial openness, temporary activation, emergent social value, and distributed agency. They are spaces where enclosure gives way to permeability and where ephemeral rhythms support forms of collective experimentation, informal care, and cultural activation. Unlike market fallows, where value is deferred, civic fallows generate value through use, even if that use is temporary or improvised. The data show that over 39.20% of the sites embodied some form of social value, often through short-term uses that transform emptiness into community infrastructure (festivals, gardens, markets, experimental architectures)—fallowness becomes a laboratory of civic imagination. This is supported by the distribution of conditions in these spaces, with three-quarters being vacant (27.5%), semi-active (17.5%), abandoned (12.5%), damaged (10%), and overgrown (5%), revealing that civic value frequently emerges in spaces not yet fully reactivated but open to use.

The spatial morphology is often soft or provisional, embracing light, non-permanent interventions that can be easily implemented and removed quickly, aligning with the transitional temporality and unfinishedness often embraced here. Access is a defining spatial characteristic signalling open, freely accessible conditions which invite participation and informal appropriation. Social value is often the dominant form of value shaped by social gatherings, artistic interventions, or cultural activities. These spaces are often the most expressive and participatory in terms of human agency and creativity, representing temporary urban commons. These fallows are not "paused," but provide productive intervals that are community-driven rather than market-timed. Regenerative value often co-exists through curated gardens, plants reclaiming edges, or spontaneous vegetation, all of which signal the active role of non-human agents in shaping these spaces.

4.2.3. Ecological Fallows

Quadrant three, ecological fallows, emerge when spatial openness intersects with long, unmanaged temporal durations, allowing natural processes, such as vegetation and wildlife, to gradually recolonise and take precedence over human intentions. The urban fallow data (Figure 8) show that "ecological landscape" appears as the single most dominant spatial type, representing 25.81% of all sites—surpassing all building-based categories combined. When paired with the 22.58% recorded as "vacant land/open plot," it becomes evident that over 48% of all identified spaces fall within conditions typically associated with ecological drift, non-intervention, and open-ended environmental processes.

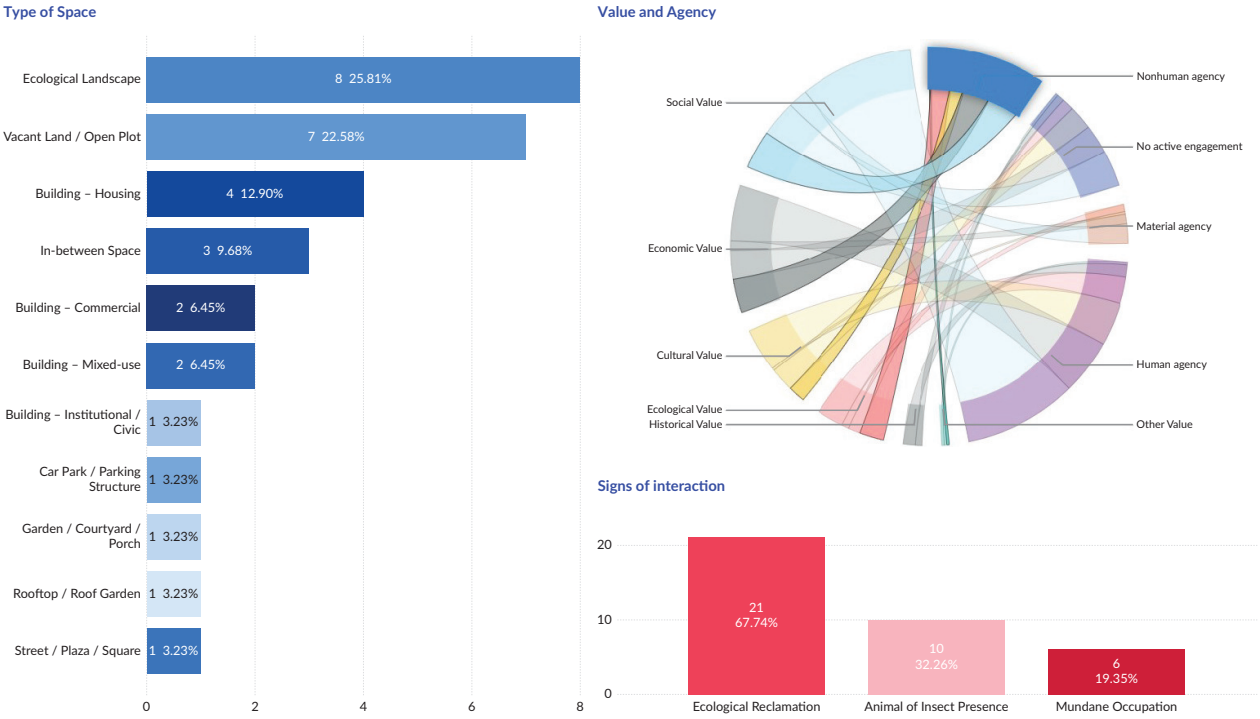


Figure 8. Non-human agency and its relations to value, signs of interaction, and type of space.

These sites exhibit characteristics of non-human succession, biodiverse habitats, material weathering, multispecies habitation, and regenerative value production, a pattern reinforced by the dataset in which ecological reclamation accounts for 67.74% of all observed interactions, demonstrating that non-human processes overwhelmingly drive the transformation of these spaces over time. They are fallows where human agency recedes or becomes peripheral, and where ecological rhythms (slow, cumulative, and cyclical) and environmental forces define the space's identity. Spatially, these fallows are often defined by their landscape-based conditions such as "open green space" or "overgrown terrain," further supported by the additional 22.58% classified as vacant land/open plot, which similarly exhibit loose boundaries and open, unprogrammed spatial configurations.

Access is often informal, unclear, and partially obstructed by non-human forces (e.g., uneven terrain, tall grass). Value is generated primarily through environmental performance such as cleansing soils, sequestering carbon, supporting pollinators, and regenerating degraded landscapes, rather than economic productivity. Thus, agency is predominantly more-than-human—plants, fungi, animals, soils, and weather are the primary

actors shaping the site's morphology through root expansion, foraging, nesting, erosion, waterlogging. This distributed agency disrupts traditional architectural assumptions about authorship, resonating with assemblage theory and concepts of sympoiesis, where regeneration arises from the entanglement of species and materials in the form of a restorative ecological latency.

4.2.4. Institutional Fallows

The last quadrant, institutional fallows, are defined by their long-term enclosure and minimal visible agency, producing sites that are stable but underused. These spaces are governed by bureaucratic or organisational structures, often maintained at a minimal level but lacking active occupation. Boundaries tend to be secured—fenced perimeters, locked access points—emphasising a maintained ownership and authority.

Across the dataset, institutional fallows most closely correspond to building types such as housing, commercial, and mixed-use structures, which collectively make up over 80% of observed sites. These may be redundant civil buildings or underused public estates whose conditions are often sustained, preventing decline and transformation, due to administrative delay and the bureaucratic inertia of heritage and planning regimes (e.g., awaiting funding cycle or administrative review). Value here is often ambivalent and layered. The site may hold conventional heritage or strategic value, but these forms of value are unrealised or underleveraged and differ depending on one's perspective (asset vs. liability). More-than-human traces appear but are often incidental rather than formative and are typically suppressed through mowing or clearing. The site is neither ecologically self-directed nor socially appropriated; its agentive force is primarily bureaucratic.

4.3. Transitions: Fluid Negotiations

As discussed, transitions across fallow types reveal that fallowness is dynamic, non-linear, and relational, with spatial, temporal, value-based, and agentive shifts producing movement between quadrants. This section characterises these movement types—horizontal, vertical, and diagonal.

Horizontal movements signal spatial transformations. Movement from enclosure to openness (left to right) marks the transition from controlled or fenced-off sites to porous, collectively shaped, or ecologically autonomous spaces, e.g., a derelict brownfield lot opens up to community gardening. Conversely, movement from right to left signals spatial containment or new enclosures, e.g., a park area fenced for redevelopment preparation. These are shifts in spatial agency, who can access, use, or influence the site (e.g., private property vs. commons)—often through shifts in governance and land use negotiation. Whereas, vertical movements signal changes in temporal rhythms from temporary pauses to sustained bureaucratic or ecological conditions. For example, shifting from evidence of cyclical or seasonal use (e.g., summer gatherings, weekend patterns) to consolidating into enduring, stabilised patterns of programmed space. Vertical shifts up are often abrupt interventions, e.g., an ecological fallow cleared for development; whereas shifts down tend to be gradual.

Diagonal transitions capture systemic shifts involving both spatial and temporal conditions. Moving from the top-left (market) to the bottom-right (ecological) suggests that a market fallow left long enough can allow ecological succession to overtake a controlled site. Whereas, moving from the bottom-left (institutional) to

the top-right (civic) suggests that institutional fallows can be reclaimed through civic or adaptive activation (e.g., policy reform or local activism opens restricted lands to participatory use). A shift from top-right (civic) to bottom-left (institutional) moves a site from an informal, temporary occupation or commons into official programmes or formalised leases. Lastly, moving from the bottom-right (ecological) to the top-left (market) offers the emergence of stewardship projects from rewilded sites, blending ecological care with community participation.

5. Conclusions

This article aimed to build upon the emerging notion of heritage as a dynamic and complex socio-cultural practice. We introduced the original concept of radical heritage through an exploration of urban spaces often deemed unworthy, unproductive, or invisible by applying our fallow lens and developing a typology framework for urban fallows. Here, urban fallows are defined as latent commons—spaces of civic potential, ecological regeneration, and social imagination. Urban fallows emerge through the interplay of four key attributes: space, time, value, and agency, providing an original contribution to debates on sustainability and heritage. The study moves beyond dominant taxonomic classifications and introduces a process-oriented, relational typology grounded in empirical observation.

Here, space is a negotiated field where power is exercised through material boundaries, resulting in distinct spatial morphologies and permeability. Openness invites civic use and ecological colonisation; whereas enclosure reinforces market or institutional control. Time is seen for its rhythmic complexity, beyond linear durations. The cyclical and multi-scalar rhythms revealed layers of temporal ambiguity and patterns—e.g., daily, seasonal, institutional, and ecological. Value is a multi-dimensional and contested construct, broadening and redistributing a fluid notion of value beyond monetary to co-exist, shift, and collide with social and ecological value. Fallows are multi-agent assemblages co-produced through multispecies entanglements, environmental forces, and organisational structures with no single actor determining outcomes. Human agency is both intentional and mundane; while non-human agency spans ecological and material forms.

Key to the narrative is the dynamic, shifting nature of fallows. The range of transitions demonstrate that fallows rarely remain as a single, consistent type; fallows are processual, constantly being reshaped by ecological rhythms, governance actions, human occupation, and material change. Fallows shift through changing boundaries, maturing ecologies, and institutional intervention. Additionally, fallows are latent commons often contested. This dual condition, generative yet contested, offers alternative urban futures rooted in ongoing processes of regeneration, appropriation, and multispecies cohabitation. Hence, urban fallows foreground what radical heritage seeks to do: unsettle inherited hierarchies of value and disrupt the assumption that heritage resides in stable objects, authorised narratives, or institutional control. Fallowing introduces heritage as an active practice of holding, pausing, and caring—one that allows meaning, memory, and ecological processes to emerge unevenly over time rather than be fixed in advance. In this sense, fallows sit within the heritage frameworks but actively rework them, opening the possibility for forms of heritage-making grounded in relational value, temporal openness, and shared urban responsibility.

The findings emerged from the particular structure and temporal intensity of the summer school, which shaped both their scope and resolution. The short, immersive format foregrounded close engagement while

limiting opportunities for durational observation, and differences in researchers' familiarity with qualitative and ethnographic readings of space inevitably influenced the depth of description, despite shared training and data harmonisation. Working across five international contexts enriched comparative insight but also introduced challenges of consistency across diverse geographical and socio-cultural conditions. Within this context, the resulting typology is empirically grounded yet remains provisional, with an attendant risk of overgeneralisation. While this study focused on characteristics transferable across contexts, future studies could examine geographic and cultural specificities to tease out more detailed recommendations. This includes governance and policy pathways that redefine how and who defines heritage and enable fallows to function as commons. Participatory mapping with residents and community groups could reveal lived experiences, memories, safety perceptions, and informal practices associated with fallows. Finally, a longitudinal and seasonal study of fallow dynamics would provide critical understanding of how the transformations unfold over time, in particular with regards to non-human actors.

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Conflict of Interests

The authors declare no conflict of interests.

Data Availability

The data supporting the findings of this study are not publicly available due to the nature of the research (participant-based discussions and workshops) but are available from the authors upon reasonable request.

LLMs Disclosure

ChatGPT (OpenAI) was used to assist with language editing only, and all intellectual content, analysis, and conclusions are the authors' own.

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ARTICLE

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Making Time Matter: Intermittent Urbanism and the Politics of Staying

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Abstract

Contemporary urban life is increasingly shaped by unstable temporal arrangements arising from redevelopment, digital mediation, shifting labour regimes, and ecological pressures. This article proposes *intermittence* as an analytical lens to understand how these temporal dynamics organise the everyday urban experience. Rather than treating intermittence as a marker of precariousness or ephemerality, the article frames it as a *rhythmic form of continuity*, sustained by patterned cycles of appearance and withdrawal that operate alongside more stable urban structures. Drawing upon phenomenological, anthropological, and chronopolitical debates, this article develops a conceptual framework that distinguishes between *temporality*, *temporariness*, and *intermittence*, and introduces a typology of temporal regimes: structural–cyclical, programmed–intermittent, occasional–temporary, and contingent. The methodology combines ethnographic observation, temporal mapping, interviews, and photographic documentation, based on fieldwork conducted within the Intermittent City research project. Four Lisbon-based cases exemplify how distinct temporal configurations shape urban practices and access to shared infrastructures: Fruta Feia (programmed–intermittent cooperative cycles), Renaturalizar Lisboa (structural–cyclical ecological care), Cinema no Estendal (occasional–temporary cultural activation), and Gira (contingent, platform-mediated mobility). The analysis shows that intermittent practices can sustain social, ecological, and cultural infrastructures without relying on permanent spatial occupation, while also exposing temporal inequalities tied to digital systems, ecological rhythms, and public space governance. The article argues that recognising time as a shared, structured, and unevenly distributed urban resource is crucial to understanding how people negotiate presence, continuity, and the politics of staying in contemporary cities.

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Keywords
intermittence; Lisbon; politics of staying; temporal regimes; temporary urbanism; urban practices; urban rhythms; urban temporality

1. Introduction

Contemporary urban life is increasingly shaped by transformations that reorganise how people inhabit, navigate, and develop attachments to the city. Processes such as redevelopment, digital mediation, shifting labour regimes, and ecological pressures have intensified experiences of uncertainty and temporal fragmentation. In this context, time emerges not as a neutral backdrop but as a medium through which practices, routines, and relationships are structured.

This article builds on Intermittent City, an interdisciplinary research project developed in Lisbon between 2015 and 2025. Situated at the intersection of urban studies, anthropology, and architectural research, the project investigates shared, temporary, and recurring urban practices that operate without permanent spatial occupation yet rely on repetition, coordination, and return. Through ethnographic observation, temporal mapping, spatial analysis, and visual documentation, the research explores how continuity, belonging, and access are produced in cities marked by instability, acceleration, and uneven redevelopment (Allegri & Ochoa, 2021; Ochoa & Allegri, 2022; Ochoa et al., 2023). Drawing on this cumulative body of work, the present article advances an integrated conceptual framework to analyse intermittent practices through distinct temporal regimes.

Lisbon offers a particularly fertile context for this inquiry. Shaped by successive phases of reconstruction, peripheral expansion, and tourism-led redevelopment, the city combines layered historical trajectories with fragmented spatial conditions. These processes have generated uneven temporal arrangements, in which access to space, infrastructure, and resources is often provisional and contested. Understanding how urban practices endure under such conditions requires attention not only to spatial form but also to the temporal regimes that organise presence, absence, and return.

The article approaches *temporality* as a structuring dimension of urban life. It introduces *intermittence* as a key analytical lens for capturing patterned cycles of appearance and withdrawal that generate continuity without relying on permanence. Rather than a sign of fragility, intermittence is understood as a form of *rhythmic continuity* through which urban practices coordinate action, sustain attachments, and negotiate access over time.

Beyond the literature discussed above, a growing body of research has examined intermittent, temporary, and rhythm-based urban practices, contributing to an expanding field of inquiry into urban temporalities. Seminal works such as "Intermittent Cities: On Waiting Spaces and How to Inhabit Transforming Cities" (Faraone & Sarti, 2008), *Urban Catalyst: The Power of Temporary Use* (Oswalt et al., 2013), "Unpacking and Challenging Habitus: An Approach to Temporary Urbanism as a Socially Engaged Practice" (Tardiveau & Mallo, 2014), or European research projects such as TUTUR – Temporary Use as a Tool for Urban Regeneration (Patti & Poliák, 2015) have explored how temporary and reversible uses of vacant or underutilised spaces interact with formal planning systems, highlighting both the opportunities and

limitations of temporariness as an instrument of urban governance. These studies emphasise the role of time-bound interventions in mediating between informality, institutional frameworks, and long-term urban transformation.

Likewise, research clusters and programmes such as Alternative Urbanisms at UCL Bartlett (Wunderlich, 2024) have investigated adaptive, provisional, and experimental forms of urban practice in contexts of uncertainty, crisis, and socio-spatial inequality. While not always explicitly framed through the notion of intermittence, all these initiatives foreground forms of non-linear temporalities, open-ended processes, and provisional arrangements that challenge conventional understandings of permanence, stability, and planning-led development. In parallel, recent theoretical contributions in the field of temporary urbanism have called for stronger engagement with temporal analysis, arguing that temporary practices cannot be fully understood through spatial categories alone. This scholarship underscores the significance of rhythm, recurrence, and temporal coordination in shaping access, participation, and exclusion within cities.

While this body of work has significantly advanced debates on temporary use, adaptability, and urban experimentation, it often remains centred on *temporariness* as a discrete policy tool or condition. In contrast, the present article conceptualises *intermittence* as a *rhythmic mode of urban organisation* that cuts across formal and informal practices, governance arrangements, and everyday forms of social reproduction (Crang, 2001). It thus foregrounds intermittence as a structural—but unevenly distributed—condition of urban life, closely tied to *chronopolitics*, inequality, and the politics of staying.

The article advances this argument by proposing a conceptual distinction between *temporality*, *temporariness*, and *intermittence*, and by developing a typology of intermittent temporal regimes. This framework enables a comparative analysis of how different rhythms structure urban practices and experiences, shaping both continuity and inequality. The empirical analysis draws on four Lisbon-based cases developed within the Intermittent City project, each exemplifying a distinct temporal regime: programmed–intermittent cooperative cycles (Fruta Feia), structural–cyclical ecological care (Renaturalizar Lisboa), occasional–temporary cultural activation (Cinema no Estendal), and contingent, platform-mediated mobility (Gira).

By placing these cases in dialogue, the article demonstrates how intermittent practices generate forms of urban continuity without permanence, while also exposing how temporal inequalities shape the capacity to remain, return, and participate in the city. Recognising time as a shared, structured, and unevenly distributed urban resource is thus central to understanding the politics of staying in contemporary urban life.

2. Time and Urban Intermittence: Conceptual Framework

Time is not a neutral background for urban processes but a constitutive medium through which social life is organised, valued, and contested. Urban life unfolds across multiple temporal layers that shape how practices emerge, endure, and disappear, influencing patterns of coordination, access, and belonging.

Philosophical perspectives have long emphasised that time is not an external container but integral to lived experience. Bergson's notion of *durée* foregrounds the continuity and depth of lived time (Bergson, 1910), while Casey highlights the intimate ties between memory, dwelling, and temporal orientation (Casey, 1993). Together, these approaches situate temporality within embodied experience, showing how urban life is

organised through rhythms of habit, return, and anticipation rather than through linear or homogeneous temporal units. Historical debates further illuminate how societies configure relationships between past, present, and future. Koselleck's concept of the horizon of expectation (Koselleck, 2004) and Hartog's account of presentism (Hartog, 2015) demonstrate that temporal orientations are culturally and historically produced, shaping what is perceived as stable, urgent, or obsolete, and influencing how cities imagine and organise their futures.

These perspectives are complemented by anthropological approaches that attend more closely to the situated and embodied production of time. Classic contributions have shown how temporal orders emerge through social classification and ritual (Durkheim & Mauss, 2017; Evans-Pritchard, 1940), while later work foregrounds how time is socially produced through practice and value (Munn, 1992). More recent scholarship highlights how contemporary capitalism reorganises time through uncertainty, instability, and the anticipation of indeterminate futures (Bear, 2014). Ingold conceptualises social life as an unfolding process shaped by movement and attention (Ingold, 2000); Adam argues that temporal structures condition coordination and inequality (Adam, 1990). Taken together, these contributions position temporality as an active medium through which social life is organised and negotiated, rather than as a passive framework within which action occurs.

Urban studies have increasingly acknowledged these dynamics, recognising that circulation, waiting, repetition, and presence structure everyday forms of sociability (Crang, 2001). Time appears not as a neutral sequence but through patterned experiences of acceleration, delay, synchronisation, and interruption that shape how people inhabit the city. In this regard, temporality aids in characterising the social, economic, and political regimes that traverse urban life and organise its tensions and releases. These include the vulnerable time embedded in experiences of precarity (Barata & Carmo, 2022); the abstract time of labour and economic coordination (Postone, 1993); the time of planned obsolescence and resistance to hegemonic chronopolitical narratives (Agacinski, 2000); fragmented and disconnected temporalities detached from integrative narratives (Han, 2017); and the accelerated time of contemporary social processes (Rosa, 2013). Ethnographic research on lived urban experience further reveals how everyday rhythms emerge through recurring interactions, routines, and shared temporalities (Hannerz, 1980), echoing what has been described as the "everydayness" of cities (Lakić et al., 2024). Yet despite this growing body of work, the temporal dimension of urban practice is still often treated as secondary to spatial analysis, leaving insufficient examination of how temporal regimes shape access, inequality, and the capacity to remain in place.

This article approaches intermittence as a specific mode of temporal organisation, structured through cycles of appearance and withdrawal and capable of sustaining continuity without reliance on permanence. To conceptualise how intermittence operates in contemporary cities, the analysis draws on three complementary theoretical traditions. First, Koselleck's model of historical time foregrounds the coexistence of distinct temporal strata—long-term structural transformations, medium-term social practices, and short-term events—allowing urban change to be understood as a field of asynchronous and intersecting durations rather than a linear process (Koselleck, 2004). Second, Lepetit's notion of social temporalities emphasises how time is produced and experienced through collective practices, routines, and situated forms of knowledge, situating temporality within everyday rhythms of work, celebration, and inhabitation (Lepetit & Pumain, 1993). Third, Lefebvre's rhythmanalysis offers a methodological lens for attending to the sensory and spatial texture of lived time. His conception of rhythm encompasses biological, technological, and

infrastructural cycles, positioning the city as a dense composition of coexisting and often conflicting temporal flows (Lefebvre, 1992). Together, these perspectives allow intermittence to be conceptualised not as an exception or failure, but as a patterned modality of urban time embedded in everyday practice and asymmetries of power. The notion of temporal regimes is used here as an operational concept to describe the structured ways in which time is socially and materially organised in urban life. While Koselleck, Lepetit, and Lefebvre provide the conceptual scaffolding for understanding temporal multiplicity, the term "temporal regime" enables a more situated analysis of how specific patterns of repetition, duration, and interruption become stabilised through urban practices. As Bjork and Buhre (2021, p. 178) propose, temporal regimes refer to "the ways that humans negotiate their temporally situated power relations with each other via discourses, histories, cultures, bodies, and technologies." This perspective resonates with recent scholarship in urban studies that analyses temporal organisation as embedded in infrastructures, planning frameworks, and spatial hierarchies (Kaun, 2015; Viderman et al., 2023). In this article, the term *intermittence* supports the development of a typology of intermittent urban rhythms, foregrounding how different modes of temporal coordination structure presence and absence in the city.

Lisbon's urban form is the result of layered historical processes that continue to shape contemporary spatial and temporal dynamics. The city's topographical constraints and post-1755 earthquake reconstruction produced the Pombaline Baixa as the rebuilt political centre of the city, characterised by rigid orthogonal planning and monumentalism, in contrast to the irregular and compact morphology of older neighbourhoods such as Alfama or Mouraria. In these areas, which still maintain their medieval urban morphology, temporal continuity plays a central role in belonging, sustained through shared routines, festive cycles, street sociability, and long-term co-presence (Fontes & Cordeiro, 2023). Peripheral expansion during the Estado Novo and post-revolutionary periods introduced large-scale housing estates, which were often poorly integrated into the urban fabric. Since the early 2000s, tourism-led redevelopment, public–private regeneration programmes, and infrastructural investment have further transformed the city's rhythms and accessibility, particularly in historic neighbourhoods and former industrial zones such as Alcântara (Vidal, 2014).

This body of work underscores that urban time is actively governed and deeply unequal. Regulations, infrastructures, and social boundaries distribute durations, delays, and possibilities unevenly across groups and territories. In this sense, intermittence becomes analytically productive not only as a pattern of appearance and withdrawal, but also as a lens through which to examine how power, belonging, and everyday life are shaped through contested temporal regimes. These uneven processes of transformation have produced fragmented spatial conditions that provide fertile ground for the emergence of intermittent practices—ecological, cooperative, cultural, or platform-mediated. Intermittence here is not simply a strategy of adaptation but a response to the historical production of spatial discontinuity and temporal inequality (Roncayolo, 1996).

Understanding the city as a temporal fabric composed of coexisting and unequal rhythms enables a shift away from linear or teleological accounts of urban development. Intermittence, in this framework, is not treated as failure or anomaly, but as a structural temporal logic that enables coordination, recurrence, and adaptability. Urban practices such as cooperative distribution, ecological care, cultural activation, or platform-mediated mobility can thus be analysed through the distinct temporal regimes they instantiate: some cyclical and durational, others episodic or contingent. These regimes operate through shared

rhythms—formalised, negotiated, or unstable—and through spatial arrangements that support return without permanence.

To clarify these distinctions, the article differentiates between three related but distinct concepts. *Temporality* refers to the fundamental condition of lived time, including how duration, sequence, and expectation are experienced. *Temporariness* denotes an administratively bounded duration, typically governed by permits, licenses, or predefined deadlines. *Intermittence*, by contrast, involves patterned cycles of appearance and withdrawal that generate meaningful return. It is a mode of continuity produced through rhythm rather than permanence. On this basis, the article adopts a typology that distinguishes four rhythmic regimes:

- Structural–cyclical: rhythms anchored in ecological, seasonal, or long-term social cycles that unfold slowly and require sustained care.
- Programmed–intermittent: rhythms dependent on regular, predictable schedules that produce stability through repetition without permanent occupation.
- Occasional–temporary: rhythms that recur without fixed programming, emerging through situated activation and community initiative.
- Contingent: rhythms shaped by instability, interruption, or dependence on external conditions such as technological mediation or logistical fluctuation.

This vocabulary sharpens the analysis of contemporary urban practices by shifting attention from duration alone to the patterned relations between presence, withdrawal, and return. From this standpoint, intermittence offers a productive lens for understanding how continuity is generated without permanence, while also revealing how temporal inequalities organise access, stability, and the politics of staying. These distinctions provide a comparative framework for interpreting the empirical cases that follow.

3. Methodological Approach

The methodological approach adopted in this article builds directly on the Intermittent City research project, combining ethnographic observation, temporal mapping, and conceptual analysis (Intermittent City, n.d.). It is adapted here to reflect the proposed typology of temporal regimes and to support a comparative reading of intermittent urban practices. Rather than treating urban practices as fixed or bounded entities, the methodology focuses on how they unfold over time through patterns of appearance, withdrawal, and return. Attention is given to how continuity, interruption, and recurrence shape everyday urban life.

Throughout the article, ecological rhythms are understood as temporalities shaped by cycles of growth, decay, and regeneration, rather than as references to environmental policy frameworks. This distinction allows the analysis to remain grounded in lived temporal experience while remaining attentive to broader urban conditions and governance contexts.

The methodological framework is structured around three complementary analytical dimensions, designed to capture the temporal organisation of practices without reducing them to static categories.

3.1. Identifying Temporal Regimes

Each case study was analysed to identify its dominant temporal rhythm. The analysis focused on how practices organise presence and absence over time, how frequently they recur, and how predictable their cycles are. This step distinguished between ecological rhythms, programmed routines, community-led activations, and technologically mediated contingencies, without forcing cases into rigid or mutually exclusive classifications. The aim was to capture temporal organisation as it emerges in practice, acknowledging that multiple rhythms may coexist or overlap within the same initiative.

3.2. Mapping Spatial Anchoring

Temporal rhythms depend on material and spatial support. Fieldwork documented how infrastructures, informal adaptations, and territorial routines enable or constrain the recurrence of practices. This dimension highlights that intermittent uses achieve continuity not through permanent occupation, but through spatial anchoring—such as streets, hubs, micro-sites, or residual infrastructures—that makes return possible. Spatial anchoring is therefore understood as relational and reversible, rather than as a fixed or exclusive occupation.

3.3. Examining Space–Time–Subject Relations

Intermittent practices are shaped by how participants experience and negotiate time in everyday life. Observations and interviews focus on how individuals anticipate returns, cope with interruptions, maintain routines, or adapt to uncertainty and technological mediation. This dimension foregrounds the lived experience of intermittence, showing how temporal rhythms shape the capacity to stay, return, or participate in urban life, and how these capacities vary across social and spatial contexts.

Together, these three dimensions enabled the construction of comparative temporal profiles for each case. They reveal how temporal regimes intersect with governance arrangements, material infrastructures, and everyday forms of care. In doing so, the methodology frames intermittent urbanism as a relational field in which continuity is produced without permanence, and in which temporal coordination becomes a key site for understanding access, inequality, and the politics of staying.

4. Case Studies: Intermittent Practices in Lisbon

Grounded in the conceptual distinctions outlined in Section 2, the following case studies examine how intermittent practices structure everyday urban life in Lisbon through differentiated temporal regimes. Rather than treating intermittence as a marginal or exceptional condition, the analysis situates it within ordinary urban practices shaped by uneven infrastructures, layered historical development, and contrasting rhythms between historic centres, modernist neighbourhoods, and transitional zones.

To strengthen analytical clarity and avoid overlapping between similar rhythmic configurations, the article focuses on one core case per temporal regime. This approach allows each case to articulate more fully the specific relations between rhythm, spatial anchor, governance arrangements, and lived experience. The cases are not intended to be exhaustive, but exemplary, illustrating how distinct temporal logics operate across different urban domains.

Accordingly, four Lisbon-based practices are examined, each corresponding to a temporal regime identified in Section 2: Fruta Feia, as an example of a programmed–intermittent regime based on predictable cycles of cooperative coordination; Renaturalizar Lisboa, illustrating a structural–cyclical regime grounded in ecological time and long-term care; Cinema no Estendal, representing an occasional–temporary regime activated through episodic cultural gatherings; and Gira, exemplifying a contingent regime shaped by digital mediation and infrastructural instability.

This one-to-one correspondence between empirical cases and temporal regimes facilitates a comparative reading of how intermittence operates across food systems, ecological stewardship, cultural production, and mobility. Read together, the cases show how continuity is produced through rhythm, repetition, and return rather than permanent occupation, while also revealing how temporal regimes distribute stability, uncertainty, and access unevenly across the city.

4.1. Fruta Feia: Cooperative Redistribution (Programmed–Intermittent Temporal Regime)

The weekly operation of Fruta Feia (Figure 1) is structured around a recurring and coordinated routine that shapes both spatial use and social interaction. As described by Ana, one of the volunteers, "Every Monday, the same ritual unfolds: We arrive around five, unpack the fruit, talk about the farmers, and by nine the space is empty again—only the smell of oranges stays." This account highlights the cyclical and time-bound nature of the cooperative's activities, in which short periods of intense collective action are followed by the rapid dissolution of the spatial setup.



Figure 1. Fruta Feia. Preparation of the baskets during weekly distribution, Campo Mártires da Pátria Hub – Galeria Monumental, Lisbon, April 2025.

Fruta Feia is a cooperative initiative founded in 2013 with the aim of redistributing fruit and vegetables rejected by conventional market standards due to size, shape, or aesthetic irregularities. In Lisbon, its operations are embedded within the city's heterogeneous urban fabric, intersecting with neighbourhoods shaped by different historical phases of development. Distribution hubs are located in areas such as Alvalade, characterised by its mid-20th-century grid and civic facilities, as well as in former industrial or transitional zones like Alcântara and Marvila, where underused buildings and residual spaces offer opportunities for reversible occupation.

The cooperative operates through a weekly, highly coordinated rhythm that temporarily activates a network of rotating hubs—markets, schools, community centres, former retail spaces, galleries, and other multipurpose venues. These sites are not permanently dedicated to Fruta Feia. Instead, they function as recurrent spatial anchors that support continuity through repetition. For a few hours each week, ordinary interiors are transformed into logistical infrastructures for sorting and distributing food baskets. At the same time, surrounding streets, loading areas, and entrances are briefly reorganised through informal practices of unloading, queuing, and social interaction. In this way, the cooperative's presence extends beyond the interior of the hubs, momentarily reshaping neighbourhood rhythms.

Fruta Feia's temporal organisation is explicitly programmed. Deliveries from rural producers, volunteer shifts, and member participation follow predictable weekly schedules that generate shared expectations and collective routines. Yet this regularity does not produce a fixed spatial form. Instead, continuity is achieved through temporal coordination rather than permanent occupation, allowing the cooperative to operate across diverse urban contexts—from residential neighbourhoods such as Alvalade to more fragmented or transitional areas of the city. This capacity to circulate and return reflects a deliberate governance strategy. New hubs are opened only when local demand, logistical capacity, and community engagement align, while underperforming hubs may be closed, as occurred with a recent Fruta Feia hub in the city of Braga, in northern Portugal. Intermittence thus functions as a mode of organisational control that prioritises adaptability over expansion.

Viewed through the lens of intermittent urbanism, Fruta Feia demonstrates how programmed repetition can operate as a form of temporal infrastructure embedded in everyday urban life. By aligning ecological surplus with predictable civic rhythms, the cooperative produces continuity through return, shared labour, and mutual coordination rather than through permanent spatial presence. Within Lisbon's uneven urban fabric—marked by layered historical development and differentiated access to infrastructure—Fruta Feia exemplifies how cooperative practices can sustain urban continuity by mobilising time as a shared resource.

4.2. Renaturalizar Lisboa: Ecological Care (Structural–Cyclical Temporal Regime)

The practices of Renaturalizar Lisboa (Figure 2) emerge through gradual and cumulative acts of care that reshape urban space over time. As noted by its initiator, Nuno Prates, what began as a small, individual gesture expanded through collective engagement: "It started with one plant, then two…people began to bring plants, to water them, to talk to each other—the city changed rhythm here." This account highlights how incremental, participatory actions can generate new temporalities of use and interaction, grounded in ecological processes and social involvement rather than formal planning.



Figure 2. Renaturalizar Lisboa. Adopted flowerbeds in everyday use, Jardim das Plantas Doadas, Alvalade neighbourhood, Lisbon, October 2024.

Renaturalizar Lisboa is an informal civic movement dedicated to reclaiming small fragments of public space through planting, care, and long-term ecological stewardship. Initiated more than two decades ago, the movement unfolded across diverse areas of Lisbon, particularly in neighbourhoods such as Alvalade, Avenidas Novas, or Marvila, where post-war urban expansion, fragmented development, and contemporary redevelopment pressures have produced a mosaic of residual plots, roadside verges, and infrastructural leftovers.

Rather than operating through formally designed parks or continuous occupation, Renaturalizar Lisboa intervenes through a dispersed constellation of micro-sites: adopted flowerbeds, spaces around tree trunks, leftover plots along railway lines, and marginal green areas embedded within everyday urban environments. These sites are not accidental voids but the outcome of Lisbon's layered urban history, shaped by successive planning regimes, road infrastructure, and periodic redevelopment cycles. Gardening sessions are promoted informally, through WhatsApp communication, and occur intermittently—on weekends, seasonally, or in response to environmental needs—yet the accumulation of these actions produces a durable spatial presence grounded in ecological time.

The movement exemplifies a structural–cyclical temporal regime. Its rhythm follows the slow cycles of growth, decay, and regeneration, intersecting with the fluctuating availability of volunteers and the unpredictability of urban governance. Acts of care are repeatedly interrupted: Plants are removed during street maintenance, damaged by parked cars, or erased by construction works associated with Lisbon's

ongoing processes of street upgrading, densification, and green rebranding. These disruptions do not mark an endpoint but become incorporated into the temporal logic of the practice, requiring repair, renewal, and return.

Over time, this cyclical persistence has generated political visibility within Lisbon's urban governance. What began as discreet and sometimes contested actions gradually contributed to regulatory changes allowing residents to adopt and maintain public flowerbeds. More recently, the movement mobilised citywide networks in response to the cutting of jacaranda trees along Avenida da República, a central axis of Lisbon's 20th-century urban expansion, extending its action from neighbourhood-scale interventions to broader ecological advocacy.

Viewed through the lens of intermittent urbanism, Renaturalizar Lisboa demonstrates how continuity can be produced without permanence or constant presence. Stability emerges through repetition and care, aligning human attention with ecological rhythms and gradually reshaping public space as a shared ecological commons within Lisbon's uneven and historically stratified urban fabric.

4.3. Cinema no Estendal: Cultural Activation (Occasional–Temporary Temporal Regime)

As dusk falls over the Pátio da Moca washhouse, white sheets are stretched between two façades, shifting gently with the evening breeze. A faint mechanical hum from the projector cuts through the courtyard as residents begin to arrive, unfolding plastic chairs, leaning against walls, settling into an improvised arrangement of shared attention. In this suspended domestic landscape, someone remarks on the transformation of the space: "This place used to be silent," one woman says. "Now it's alive again."

Cinema no Estendal (Figure 3) is an itinerant short-film festival created in 2018 by the Portuguese collective Coletivo Pátio. The initiative activates overlooked micro-infrastructures across Lisbon—particularly in historic neighbourhoods such as Alfama, Arroios, Intendente, and Lumiar—through minimal, reversible cultural interventions. These sites, shaped by dense pre-modern morphology and long histories of everyday sociability, provide both material and symbolic conditions for episodic reactivation.

Before each screening, the collective undertakes situated fieldwork, including site visits, spatial observation, and informal conversations with residents. This preparatory process allows each intervention to respond to the specific histories, spatial constraints, and social dynamics of its location. Within Lisbon's historic neighbourhoods, where tourism-led redevelopment has intensified pressures on everyday uses of public space, these episodic activations momentarily reopen sites of collective presence without fixing them in permanent cultural programmes.

Public washhouses play a central role in the project. Once essential infrastructures of everyday labour and neighbourhood care, many have lost their original function and now occupy marginal positions within the contemporary city. Cinema no Estendal temporarily reactivates these spaces through deliberately light transformations: Clotheslines become projection screens, small sheds serve as projection booths, and portable equipment is assembled and dismantled within a few hours, leaving no material trace.



Figure 3. Cinema no Estendal. Temporary outdoor screening using domestic infrastructures, Pátio da Moca Washhouse, Arroios neighbourhood, Lisbon, June 2024.

Cinema no Estendal exemplifies an occasional–temporary temporal regime. Events do not follow a fixed calendar but recur through loosely seasonal and opportunity-based cycles shaped by volunteer availability, local consent, and spatial accessibility. Continuity is produced through recognisable returns and accumulated memory rather than through regular programming. In the context of Lisbon's rapidly transforming historic neighbourhoods, the project demonstrates how episodic cultural practices can generate symbolic continuity and collective presence while resisting both spatial fixation and institutionalisation.

4.4. Gira: Platform Mobility (Contingent Temporal Regime)

On a weekday morning in Intendente, the Gira station stands half-occupied, with several empty docks and a single bicycle visibly out of place. A passer-by pauses, scanning the terminal, then mutters in frustration: "There are no bikes again." Later that same day, at Cais do Sodré, another user steps off a ride and hesitates at the dock interface, visibly annoyed: "It froze—again." The briefness of these exchanges is telling: moments of expectation interrupted by small, recurrent failures that have become part of the system's everyday operation.

Gira (Figura 4) is Lisbon's public bike-sharing system, launched in 2017 as part of the municipality's strategy to promote sustainable mobility and reduce car dependency. Many of its docking stations are concentrated in central areas such as Baixa, Cais do Sodré, and Intendente, areas marked by intense tourism and

multimodal connectivity, while many peripheral neighbourhoods—shaped by mid-20th-century housing policies and post-revolutionary expansion—remain comparatively underserved. This uneven spatial distribution mirrors long-standing infrastructural asymmetries within Lisbon's metropolitan development.



Figure 4. Gira. Public bike-sharing station in everyday operation, several places in Lisbon, September 2025.

Although publicly funded, Gira operates through a complex assemblage of physical infrastructure, digital platforms, and private management. Access to bicycles is mediated through mobile applications, user accounts, and real-time data, embedding everyday mobility within forms of digital governance. Stations anchor the system materially in the urban fabric, yet their effectiveness is conditioned by Lisbon's topography, street morphology, and the competing demands placed on public space in central areas.

From the perspective of intermittent urbanism, Gira exemplifies a contingent temporal regime. While designed for continuous availability, access to bicycles is frequently interrupted. Malfunctioning docks, offline stations, or unavailable bikes reorganise daily routines, producing waiting times, detours, and exclusions. In central districts, users may adapt by walking to adjacent stations; in peripheral zones, where stations are fewer and distances greater, interruptions translate into more acute forms of temporal exclusion.

These contingencies expose the temporal fragility of "smart" urban infrastructures. Platform-mediated mobility redistributes not only access but also uncertainty, making time loss and unpredictability a routine part of urban movement. Alongside Gira, Lisbon hosts a range of cycling-focused civic initiatives—such as MUBi, Cicloficinas, and Lisbon Bicycle Trains—that seek to counterbalance these fragilities through collective learning and advocacy, highlighting how mobility in Lisbon is negotiated through both technological systems and situated social practices.

Across the four case studies, intermittence emerges as a differentiated yet coherent mode through which urban continuity is produced without reliance on permanent spatial form. Fruta Feia, Renaturalizar Lisboa, Cinema no Estendal, and Gira each articulate a distinct temporal regime—programmed–intermittent, structural–cyclical, occasional–temporary, and contingent—through which rhythms of repetition, care, encounter, and access organise everyday urban life. While these regimes operate in different domains—food redistribution, ecological stewardship, cultural production, and mobility—they share a common logic: Stability is generated through return, coordination, and adaptation rather than through continuous occupation or fixed infrastructures. Read comparatively, the cases show how temporal regimes shape not only spatial anchoring but also modes of governance and lived experience, from cooperative self-organisation and informal care to platform-mediated access and episodic publics. Together, they demonstrate that intermittence is neither accidental nor marginal but a structuring condition of contemporary urban practices, producing both possibilities for collective continuity and differentiated exposures to disruption, delay, and exclusion.

Table 1 synthesises the four case studies by mapping their respective temporal regimes, spatial anchoring, and forms of lived experience.

Table 1. Rhythmic regimes and case studies.

Case Study	Temporal Regime	Spatial Anchoring	Lived Experience
Fruta Feia	Programmed–intermittent	Rotating hubs activating underused civic spaces	Shared logistics; ecological and social synchronisation
Renaturalizar Lisboa	Structural–cyclical	Micro-sites maintained through long-term stewardship	Slow attachment; cumulative ecological care
Cinema no Estendal	Occasional–temporary	Reactivation of disused washhouses through reversible setups	Temporary publics; convivial gatherings; revaluation of overlooked spaces
Gira	Contingent	Docking network mediated by digital platform; uneven coverage	Expanded spatial reach of cycling infrastructure alongside unpredictable access, waiting, and temporal inequality in mobility

5. Discussion

The empirical cases analysed in this article operationalise the conceptual framework introduced in Section 2, in which time is understood not as a neutral background condition but as a constitutive medium shaping social coordination, institutional arrangements, and everyday urban experience. Examining four empirically grounded practices in Lisbon demonstrates how differentiated temporal regimes organise urban life across distinct domains—food redistribution, ecological care, cultural production, and mobility—while remaining embedded in ordinary practices and situated contexts.

Rather than suggesting that urban life is primarily organised through temporary or informal arrangements, the findings show that continuity is produced through rhythms of repetition, return, and maintenance that coexist with, and at times operate independently from, stable institutional frameworks. In this sense, intermittence does not appear as an exception to urban order, but as one of its organising principles, enabling practices to endure and adapt under conditions of spatial instability and temporal uncertainty.

Across the cases, repetition functions as a form of temporal infrastructure. In Fruta Feia, weekly cycles of cooperative redistribution generate predictability, trust, and coordination without reliance on permanent spatial occupation. In Renaturalizar Lisboa, cyclical ecological temporalities introduce slow rhythms of care that accumulate over time, producing durable spatial effects through seasonal recurrence and long-term attentiveness rather than through formal programming. Cinema no Estendal illustrates a different configuration, in which continuity emerges from occasional and low-frequency cultural activation, sustained through recognisable returns and accumulated memory despite the absence of fixed schedules. Gira, by contrast, exposes a contingent regime in which fluctuating rhythms of availability, malfunction, and repair shape platform-mediated access to shared mobility.

Read comparatively, these cases show that temporal regimes shape not only everyday routines but also forms of governance and inequality. The capacity to rely on repetition, anticipate return, or absorb disruption is unevenly distributed across practices and urban contexts (Cerrada Morato et al., 2025). Programmed and structural–cyclical regimes tend to foster stability through collective coordination and care, while contingent regimes redistribute uncertainty, producing waiting times, interruptions, and exclusions that disproportionately affect peripheral areas and users with lower temporal or digital resilience. Occasional regimes occupy an intermediate position, demonstrating how episodic practices can generate cumulative social and symbolic value even when they do not guarantee sustained access or institutional support.

Approaching time as a distributive medium brings the chronopolitical dimension of urban life into sharper focus. Temporal regimes regulate access to food systems, ecological commons, cultural participation, and mobility infrastructures, shaping who can remain, who must continually adapt, and who becomes temporally precarious within the city. Chronopolitics, in this sense, is produced not only through formal planning instruments or regulatory frameworks, but through everyday alignments—and misalignments—between urban inhabitants and the rhythms that organise services, infrastructures, and opportunities.

These findings underscore the relevance of a time-aware urbanism that complements spatial and regulatory approaches with explicit attention to rhythms, cycles, and temporal inequalities. Recognising that urban continuity is often sustained through temporal coordination rather than permanent form has direct implications for planning, policy design, and urban governance. By foregrounding intermittence as both an analytical and operational lens, this article contributes to debates on urban justice and sustainability, arguing that attention to temporal regimes is essential for understanding how cities endure, adapt, and negotiate the politics of staying over time. In this sense, the analysis aligns with rhythmanalysis in treating the city as a composition of overlapping, embodied, and uneven rhythms, through which access, stability, and exclusion are continually produced in everyday urban life.

6. Conclusion

This article argued that contemporary urban life is sustained not exclusively through fixed arrangements and permanent infrastructures, but through a multiplicity of rhythms by which practices appear, withdraw, and return. While stable institutions, regulatory frameworks, and built form continue to play a central role in urban organisation, the Lisbon-based cases examined here show that intermittent practices are fundamental to the production of everyday continuity, access, and collective life. These practices operate within and in relation to fixed structures rather than outside them, unfolding across multiple temporal layers in which structural, programmed, episodic, and contingent rhythms intersect—sometimes reinforcing one another, sometimes clashing—across uneven urban space.

By analytically distinguishing between temporality, temporariness, and intermittence, and by examining how these modes of time operate across four empirically grounded cases, the article positions intermittence as a meaningful form of urban organisation that complements, rather than replaces, permanence. Across domains as diverse as food redistribution, ecological stewardship, cultural production, and mobility, continuity emerges through patterned cycles of repetition, care, encounter, and access. These cycles often operate alongside—and at times compensate for—the limits of fixed spatial and institutional arrangements, mobilising rhythm and return as forms of temporal infrastructure.

At the same time, it is essential to recognise that fixed arrangements remain fundamental to the organisation of most urban lives. Planning regulations, infrastructures, housing systems, labour schedules, and welfare institutions continue to structure daily routines, life chances, and long-term trajectories. The contribution of this article is therefore not to displace the importance of permanence, but to address a persistent imbalance in urban research, in which fixed arrangements tend to overshadow the role of intermittent practices. When non-permanent activity is framed solely as temporariness, the structured repetition, coordination, and affective attachment that characterise intermittent regimes risk being overlooked. The empirical analysis suggests that such practices—while embedded within stable frameworks—are often more consequential for everyday continuity, access, and participation than is commonly acknowledged, particularly in urban contexts marked by redevelopment pressure, infrastructural unevenness, and socio-spatial instability.

The four cases analysed—Fruta Feia, Renaturalizar Lisboa, Cinema no Estendal, and Gira—demonstrate how intermittent practices sustain social, ecological, cultural, and infrastructural functions without relying on permanent occupation or continuous presence. They show how repetition, return, and temporal coordination enable practices to endure while remaining adaptable, and how different temporal regimes distribute stability and uncertainty unevenly, shaping differentiated capacities to stay, return, and participate in urban life.

Taken together, the findings foreground temporality as a socially produced and unevenly distributed dimension of urban experience. The typology of temporal regimes—structural–cyclical, programmed–intermittent, occasional–temporary, and contingent—offers a comparative lens through which urban continuity can be understood as rhythmically composed rather than spatially fixed. In this sense, the article aligns with insights from rhythmanalysis, treating the city as a constellation of overlapping and embodied rhythms through which access, coordination, and exclusion are continuously negotiated.

From a planning and governance perspective, these insights point to the relevance of a time-aware urbanism that complements spatial and regulatory approaches with explicit attention to rhythms, cycles, and temporal inequalities. Recognising that urban continuity is often sustained through temporal coordination rather than permanent form has implications for how urban policies address care, access, and sustainability. Rather than privileging permanence or novelty alone, this perspective understands the city as a temporal commons, in which fixed arrangements and intermittent rhythms interact to shape the politics of staying under conditions of ongoing urban change.

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The authors declare no conflict of interests.

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Time After Time: Community-Led Participation in Urban Development Practices in Rotterdam

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Abstract

Community-led initiatives are increasingly recognised as contributors to sustainable and socially just urban transitions, but their capacity to shape formal urban development processes remains insufficiently understood. This article examines a grassroots case in Rotterdam, TheSpace_Coolhaven (2021–2024), and its nomadic successor, the Coolhaven Beating Heart Participatory Quest (2025), to explore how temporary commoning can configure city-making over time. Grounded in theoretical work on urban commons, temporary urbanism, and participatory governance, the study applies the access, membership, and ownership (AMO) framework within a longitudinal action-research methodology, drawing on participatory observation, internal documentation, workshop outputs, communication material, and six semi-structured interviews with community and institutional actors. Findings indicate that temporary access to vacant social housing enabled urban commons to be prefigurative, characterised by intensive socio-cultural programming, shared stewardship, and informal knowledge infrastructures. This temporary commons fostered collective learning and proximity-based governance. Yet, it also demonstrated fragility under property-led redevelopment, facing a nomadic condition in between institutional time frames. The article argues that community-led initiatives should be recognised as urban commons infrastructure with the potential to inform more inclusive, collaborative, and reflexive approaches to urban development in the Netherlands and comparable contexts.

Keywords

Rotterdam; temporary urbanism; urban commons; urban development practices; value creation

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1. Introduction

The value of community-led initiatives (CLIs) has been recognised at the niche level by Seyfang and Smith (2007) and at the public administrative level by Bovaird (2007). Their value has increasingly led to the recognition of the role of CLIs in urban sustainable transitions (Raj et al., 2022). In fact, CLIs' value production role has been increasingly integrated into European policies, and the European Commission's recognition is made evident with the New European Bauhaus programme (Krabbendam et al., 2025).

From everyday urban hyper-local practices and appearances (Mehrotra, 2005), value production emerges over scales (Brenner, 2019). Citizen cultural initiatives characterise various urban neighbourhoods. However, in the context of the ongoing housing crisis and gentrification drive (Janssen et al., 2024), it is unclear how a CLI can integrate with urban and real estate development processes (Hofstra & Edelenbos, 2025).

Under the banner of "making people take part," the Dutch state-supported "community-building work" (*Opbouwwerk*) system between the 1970s and 1990s proved to be effective at inclusion and at linking residents and governmental bodies (Baillergeau, 2002). Today, the Dutch national government (*Rijksoverheid*) recognises participation and cooperation with society as parts of national spatial planning. However, formulations remain vague in the long-term vision for 2030–2100 defined by 8 of the 15 Dutch ministries (Ministerie van Volkshuisvesting en Ruimtelijke Ordening et al., 2025). The Netherlands Environmental Assessment Agency (Planbureau voor de Leefomgeving) highlighted the need for the processes of planning and implementation to shift and become more flexible and integrative (Planbureau voor de Leefomgeving, 2025). In contrast, in December 2023, the practice advisory report by the Advisory Board for Environment and Infrastructure (Raad voor de Leefomgeving en Infrastructuur) emphasises how urban development faces challenges of complexity and new sustainability imperatives (Raad voor de Leefomgeving en Infrastructuur, 2023).

To seek answers to these challenges, the questions guiding this study are: How can CLIs be integrated into urban development processes time after time? What are the conditions for a CLI to thrive? What are the contemporary challenges related to resource management in urban commons?

This article is written from the perspective of a group of practitioners, activists, and researchers who, over five years, have developed field experience and community engagement practice in Rotterdam. It takes a qualitative research stance towards two successive CLIs. The article draws on the results of what began as a bottom-up process at TheSpace_Coolhaven (2021–2024; hereafter TheSpace) and later evolved into the nomadic Coolhaven Beating Heart Participatory Quest (2025; hereafter The Quest) in the Delfshaven neighbourhood in Rotterdam.

1.1. Participation and CLIs in Rotterdam

In 2025, a study of 102 municipal audit chamber reports, published by the Dutch Association of Audit Offices (van Stipdonk & van den Berg, 2025), highlights that civic participation in urban development since 2009 has remained a formality initiated by a municipal trajectory or process logic—in information and participation meetings, planned urban development projects are presented to the public. At the start of 2024, the Environment and Planning Act of the Netherlands (*Omgevingswet*) enforced participation as a

municipal requirement (Informatiepunt Leefomgeving, 2024). Recent research on the first experiences shows that legal requirements still do not regulate the content and output of the participatory process, thereby maintaining the risk that participation becomes a formal box-ticking exercise (Hollemans et al., 2025).

Considering the value of CLIs and overall sustainability transition requirements, bottom-up co-creation could improve urban development processes. Prieto-Viertel et al. (2025) criticise Rotterdam's "balanced neighbourhoods" municipal approach, claiming that social resilience cannot be engineered merely through property-value balancing. Instead, genuine resilience stems from fostering social cohesion and informal support networks—core outcomes of strong CLIs. The city's ongoing densification, driven by housing shortages, has reshaped certain neighbourhoods, where residents perceive increased attractiveness but declining social cohesion, diversity of facilities, and mental well-being due to insufficient involvement in planning (Barsties et al., 2025). Longitudinal analyses by Nelson et al. (2024) show persistent spatial inequalities, with wealthier areas reaping more benefits from homeownership policies, reinforcing the importance of bottom-up action in less advantaged districts.

Kourtit et al. (2024) introduce the concept of "neighbourhood love," framing Rotterdam as an "archipelago of urban villages" in which emotional and social attachment to place emerges from access to amenities and community vitality—conditions that CLIs often nurture. Comparatively, the Tweebosbuurt case exemplifies how resistance movements form part of a broader gentrification–resistance nexus, showing that civic mobilisation and local solidarity could mediate top-down urban change (Knieriem et al., 2025). The same processes need to be formulated, integrated, and defined to better define the role of CLIs in urban development. A study by J. E. de Jong and Berkers (2024) highlights that "districts of ease" in Rotterdam—diverse, mixed-income areas like Delfshaven—are those where inclusion and social navigation are most successful.

2. Theoretical Background

2.1. (Temporary) Urban Development Practices

Temporary urbanism is a prominent topic in urban research such as Urban Catalyst (Oswalt et al., 2013); T-FACTOR in 2020–2024 (Martelloni et al., 2023); and NOMAD in 2023–2025 (European Commission, 2025). These studies have shown that community practices are valuable for the regeneration of places and the economy (Mazzarella et al., 2025), but they also generate contradictions and sometimes risk being manipulated in urban development processes (Ferreri, 2015).

Recognising the balance between either the maintenance, or emergence of such processes, Calzati et al. (2022) suggest a cycle of disclosure for urban commons. This cycle can be ignited by making urban commons components explicit, as categorised by Feinberg et al. (2021) as associated mechanisms and processes, binding institutions, users, and resources. This cyclic process can be reignited through the disclosure (or enclosure) of such components of the commons. In parallel, the expansion of economic and urban homogeneity also increases the risk of obsolescence. The diversification of the city's economic function stands for the work of (un)prosperous citizens and their chances for participation in real, changing urban development (Jacobs, 1969).

From a social-ecological perspective, Bookchin (1974) affirms that "modern city planning offers us functional urban designs without human values and rationally organised space without civic content," as detracted. In the urge to steer the environment in (re)development, urban professionals neglect the transformative potential of participation and proximity as drivers of cohesive and vibrant economies for our cities (Yank, 2015). In failing to do so, urban experiments die, are marginalised, or assimilated (Savini & Bertolini, 2019). Community buildings are planned to be demolished, and space(s) for transformation are alienated from the city's community practice.

A place-shaping continuum enables more coherent integration of project stakeholders. Carmona (2013) illustrates this as a continuum which spans architects, urban designers, planners, developers, managing agents, regeneration bodies, community groups, investors, and politicians. As Dombroski et al. (2019) argue, the collective process needs to be reconsidered as an integrated whole. When treated as isolated contributions, they become counter-cyclical, separated from the potential to sustain ecological urban processes.

2.2. Continual CLIs and Urban Commons

De Moor (2023) stated that for building a community economy in Rotterdam it is important to have spaces that make CLIs tangible and enable them to play a central role in creating and sustaining urban commons. CLIs represent a transformative paradigm in urban governance and spatial practice, reconceptualising cities as shared resources collectively managed by communities, rather than solely by the market or the state (Manthey, 2024). Albeit not without controversy, the mechanisms of (formal) participation better serve citizenry accustomed to administrative terminology (W. de Jong & Verkuyten, 1996) or procedural formats (Boonstra & Boelens, 2011) that enclose control over the results.

Despite innovative propositions, urban commons stand as transformative practices only in their ability to challenge, alter, or replace dominant institutions in a specific social and material context (Pel et al., 2020). As temporarily configured, the given affordance to prefigure common spaces through everyday ground practice is discarded by yesterday's planning. The persistence of tomorrow's social reproduction (Lefebvre, 1992) of a common space and practice is conditionally exchanged for the resources presently demanded (Botha et al., 2025). Research by van der Zwaard et al. (2018) and Lengkeek and Specht (2022) also addresses the challenge of not only initiating but sustaining citizen initiatives "beyond the pioneering phase", including "social real estate and the right to the city" (translated titles) as central for the reconfiguration of current urban logic through Rotterdam's citizen initiatives.

Thus, access to the commons is multidimensional: It includes spatial access to land and buildings, institutional permission, access to resources and information, social inclusion, and security of use over time. The process of commoning (Linebaugh, 2008; Stavrides, 2016) emphasises the dynamic nature of membership. It involves participatory governance, place-based programming, inclusive and exclusionary dynamics, capacity-building, and the development of communicative infrastructures. Furthermore, debates around enclosure and counter-enclosure (De Angelis, 2017a, 2017b) and urban political economy (Harvey, 2012) underscore this ownership dimension. Ownership includes formal tenure and stewardship models such as community land trusts (Huron, 2015), alongside collective decision-making rights, control over design and use, authorship of narratives, and equitable distribution of value. In this sense, urban commons

can be best understood as collectively governed infrastructures in which *access*, *membership*, and *ownership* interlock to support more just, resilient, and adaptive urban futures.

2.3. Access, Membership, and Ownership: A Framework for CLIs

In 2023, the peer_protocol foundation defined the access, membership, and ownership (AMO) framework (Table 1) for the replication of its processes and methods (peer_protocol foundation, 2023; Santos, 2024) together with other collectives and communities within and around the development of TheSpace in Rotterdam. Based on the theories of urban commons and participation, this study further defines the criteria of the conceptual framework in accordance with the literature.

Table 1. The AMO framework.

Dimension	Definition	Criteria
Access	Use or benefit of shared resources	A1. Access to space or buildings A2. Institutional access & permissions A3. Resource access (material/funding) A4. Informational access A5. Social access & inclusion A6. Temporal access/duration
Membership	Right to participate in managing, governing, or shaping the urban commons	M1. Roles & governance M2. Participation modes M3. Practices & programming M4. Inclusion or exclusion dynamics M5. Capacity & learning M6. Communication channels
Ownership	Control over the shared resources	O1. Tenure & legal status O2. Stewardship (care & maintenance) O3. Decision rights & agenda-setting O4. Spatial & design control O5. Narrative ownership (story, identity) O6. Value & benefit distribution

The AMO framework provides a critical lens for understanding CLIs' co-creation and their assessment in an urban development process and has guided the analysis of the action research process presented in the next section. Developed to empower local communities, this framework aims at enhancing their capacity to access spaces, resources, and decision-making channels (Boydell & Searle, 2014; Colding et al., 2013; Williams, 2023). The concept of nurturing membership through inclusive participation and shared governance (Foster & Iaione, 2019; Marella, 2017; Park et al., 2020) complements the objective of ensuring forms of ownership—legal, narrative, and functional—that secure long-term stewardship (Caciagli & Milan, 2021; Iaione, 2016).

This approach positions community members as active co-creators of their urban environments. At the same time, these definitions may be interpreted differently by various urban actors. Therefore, the AMO framework is used in this study to analyse the case study experience from multiple perspectives.

3. Materials: TheSpace and The Quest in Coolhaven, Rotterdam

This study analyses experiences of action research starting from TheSpace, a temporary urban commons in Rotterdam, and continuing as The Quest, a nomadic cultural initiative aimed at conducting research and self-organising with the actors directly involved in grassroots urban transformation processes.

The temporary urban commons studied emerged in a small ground-floor apartment of an inner-city block in Rotterdam, in the Coolhaven neighbourhood, which is part of the Delftshaven district. The informally named IJzerblok (Figure 1) had a total of 4–5 floor levels, with ca. 6,000 m^2 distributed over 42 apartments (previously social housing) and a shared inner garden. After a failed redevelopment permit application, the apartments were made available as studios for students and alumni at the applied sciences art school Willem de Koning Academy in 2020. As agreed with the block's owner, the social housing corporation Woonbron, this anti-squatting arrangement was devised in response to the unfolding vacancy and relocation of IJzerblok's tenants, with an undetermined date for demolition.



Figure 1. A map of the Coolhaven (Rotterdam, the Netherlands) neighbourhood, with the IJzerblock (in red), public green-areas (in light green), and an existing urban gardening route (in dark green). Source: Created by the authors for The Quest's second workshop.

The two floor-level studio (apartment) was found derelict and was collectively refurbished as TheSpace. TheSpace started as a co-working space. The members of TheSpace provided wider access and involvement while enforcing a non-commercial, donation-based practice. Two members responsible for the development of the initiative were previously involved in another (temporary) urban commons.

As TheSpace as a physical place would come to an end, its initiators and collaborators prefigured The Quest (2025). The Quest started in TheSpace and then continued as a parallel nomadic exploration of the possibilities for communal influence and participation over Coolhaven's urban development through topical workshops and cultural moments. Its preparation included four workshops held before the closure of TheSpace in the summer of 2024.

After TheSpace closed, an effort was made to communicate with a significant number of stakeholders. They included participants from TheSpace, as well as residents and various professionals from institutions in the neighbourhood and the city. Later, the project for The Quest was approved as a *bewonersinitiatief* (residents' initiative) by the Delfshaven-Schiemond *Wijkraad* (neighbourhood council) at the end of 2024. Eventually, a new cycle of three workshops and two cultural moments were held in the same neighbourhood in 2025.

4. Methodology: Qualitative Analysis of a CLI Action-Research

This study is the result of a participatory action research process (Chevalier & Buckles, 2019; Greco & Berti, 2025; McNiff, 2013) and an ex-post qualitative analysis to investigate how this CLI has engaged with and contributed to urban development through evolving forms and practices over time. Members of the research team have been involved at different levels in initiating, planning, organising activities, and participating across both phases (Figure 2). The temporal scope of the study spans from 2021 to 2025, and the data sources include:

- Database of activities of TheSpace (2022–2024), maintained by the peer_protocol foundation;
- Workshop reports and repository of The Quest (2024–2025; peer_protocol foundation, 2025);
- Internal project documentation and meeting notes;
- Field observations and reflective conversations;
- Communications and event materials;
- In-depth interviews with initiative organisers and involved stakeholders (n = 6) in 2025;
- Records of funding applications, planning correspondence, and reports.

Reflections on first-phase outcomes were generated through workshop reports, internal documentation, meeting notes, field observations, and reflective conversations conducted during workshop activities and preparatory meetings. The workshops of The Quest were structured as a co-design process, with a collective evaluation applying the SOCRATES (SOcial multi-CRiteria AssessmenT of European policieS) method (Munda, 2023). This method has already been implemented in the co-design of urban strategies both in the context of urban living labs (Mazzarella et al., 2024) and for place-based and community-driven strategies (Grieco et al., 2024).

As the last step of the research process, in-depth interviews were conducted to capture ex-post reflections from organisers and stakeholders. To guide the analysis of how the two phases engaged with urban development processes over time, the study applied the AMO framework defined in Section 2.

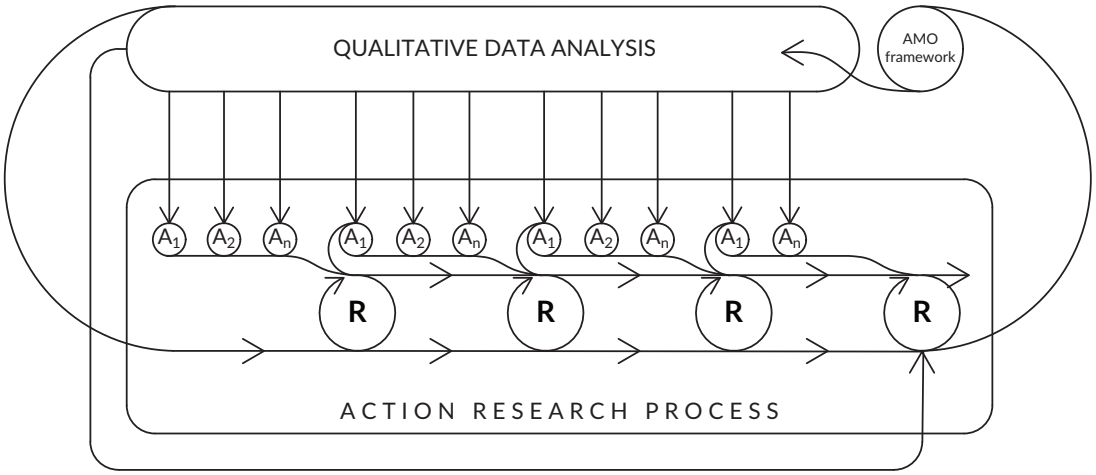


Figure 2. Action-research methodology and qualitative data analysis structured by the AMO framework. Note: A stands for Action and R for Research.

5. Results

5.1. More Than Just a Space: The Making of Rotterdam's Beating Heart

5.1.1. The Enclosure of TheSpace and the Discovery of Urban Development Practices

Between March 2022 and July 2024, TheSpace hosted a diverse program of 283 recorded events , drawing an estimated 1,300 participants. Activities ranged from regular music performances and jam sessions, workshops on creativity, wellbeing, and sustainability, as well as meetings, public presentations, and zero-waste dinners. Collaboration with other organisations was a defining feature of the ecosystem of TheSpace: Approximately 40–45% of the overall activity originated from outside the core team of TheSpace (Figure 3).

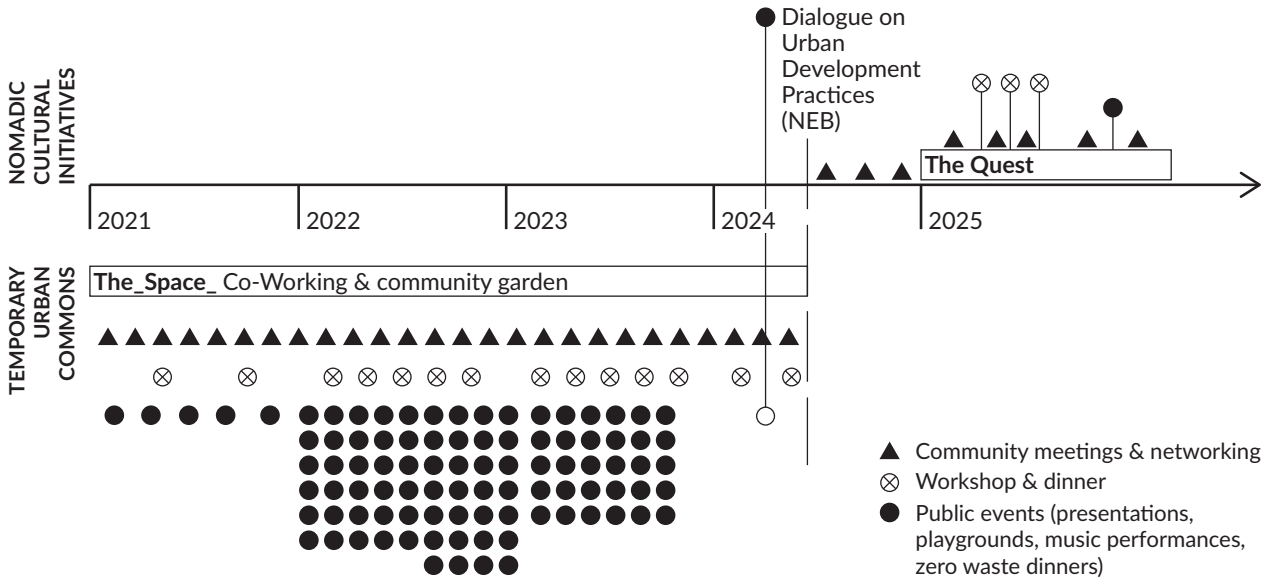


Figure 3. Timeline of the CLI from TheSpace to The Quest. Source: Elaboration by the authors based on data from the peer_protocol archive.

In spring 2024, as part of field research and collaboration activities awaiting the closure of TheSpace, the peer_protocol foundation sought to learn from and advocate for other initiatives and programmed the Dialogue øf Urban Development Practices (peer_protocol foundation, 2024). The event (Figure 4a) brought together 11 similar practices and one research project and was hosted as part of a partnership with the Rotterdam municipality. Out of the 11 initiatives engaged in the Dialogue øf Urban Development Practices (peer_protocol foundation, 2024), three stood out for their capacity to positively impact urban development, each with its own history of enclosure resistance. These three initiatives have involved the municipality and made use of communal self-building, resulting in both social and technical innovations in the development of their sites. An appropriate urban research agenda evolved through these initiatives. Some of the lessons learned from the event include best practices in implementing activities and services in the neighbourhood, the role of participatory planning for project success, addressing gentrification as part of policy that includes social temporary use, the need for flexible budget administration, the potential of Rotterdam's Right to Challenge policy for "organising public services in a socially equitable manner," addressing short-term arrangements and, if possible, buying property, and other policy approaches including long-term leases and loan guarantees.



Figure 4. Selected CLI activities: (a) panel of the Dialogue øf Urban Development Practices; (b) the name A tree fest in IJzerblok's garden; (c) The Quest's dinner in the Treasure of Schoonderloo garden. Photos by the peer_protocol foundation.

5.1.2. The Quest

The early ideas for what became The Quest followed the *Hart van Coolhaven* (Heart of Coolhaven) redevelopment project for IJzerblok. The Quest reviewed the work performed by the developer in the neighbourhood, in a process involving both the municipality and local partners, as reported by the municipality in the area development *Ambitieplan* (Ambition Document; 2023). The review process included creating a shared documentation repository containing neighbourhood policies, local urban development projects, and studies of redevelopment alternatives for IJzerblok.

The main aim of The Quest was to continue the socio-cultural work of the TheSpace community in the Coolhaven neighbourhood and to continue the discussion started at the event Dialogue øf Urban Development Practices. It was possible with funding provided by the local neighbourhood council, following

various requests and pledges from locally supported initiators. The initiative took the form of a nomadic campaign with an iterative exposition in spring 2025: three co-creation workshop sessions followed by additional meetings and a major zero-waste dinner event. Each session was organised and led by one of the authors of this article, with all four participating. As the process unfolded, the group dynamic strengthened, creating more shared ownership and co-creative engagement.

As part of the co-creation process with different neighbourhood actors, the research mapped the needs of local entrepreneurs, evacuated artists, temporary and permanent residents, ex-residents, and CLIs in particular. It also included interviews with stakeholder representatives and configured different participatory processes. The initiators did not identify any (ex)residents' committee beyond a recently implemented tenant council that was part of the decision-making of the social housing corporation.

As the local council revised the original The Quest's proposal, the scope of the quest for a co-created urban environment included other ongoing neighbourhood (re)developments. These have been included in the shared documentation repository for the project, including reports and documentation on local processes and participation. The Quest initiators have equally participated in events organised by the recognised stakeholders, including social housing corporations and the municipality.

5.1.3. The Tribe

Participants joined The Quest workshops either by invitation or through social media channels of TheSpace and the neighbourhood, bringing together both new and familiar faces and continuing its prefigurative practice as a collective—identified here as "the tribe" (Figure 5). They came from the neighbourhood and other areas of Rotterdam, representing a wide range of ages and socio-cultural backgrounds. Over the course of the workshops, this temporary urban commons gained enough momentum and agency to go beyond the funded scope and organise a collective open dinner with another local gardening initiative in the Coolhaven neighbourhood.



Figure 5. "The tribe" of participants of the Quest workshops at the Rotterdamse Academie Van Bouwkunst, Rotterdam, 2025. Photos by the authors.

In the first workshop, the TheSpace's context was introduced, and participants were invited to develop a strategy for community building that could be integrated into urban development. In the second workshop, an analysis of the top-down projects planned for the neighbourhood was presented, and participants were grouped to co-create ideas for public spaces in the neighbourhood, proposing community events, temporary pavilions, and community gardens connected to the existing social infrastructure in Coolhaven. The participant groups co-created visions to develop temporary strategies for engaging each area. The third session brought these co-designed results together into a broader discussion. In the last session, the SOCRATES multi-criteria analysis method was applied to assess the impact of the strategies and the different preferences, but most of the work focused on discussing shared criteria to fairly assess the co-designed strategies.

5.2. The Enclosure of Prefigurative Space and the Making of The Quest

Interviewees, as outlined in Table 2, represent a spectrum of positions, ranging from initiators and collaborators (P1–P2) to institutional actors, including a housing association representative (P3), municipal project managers (P4–P5), and a long-term resident (P6).

Table 2. In-depth interviews about TheSpace and The Quest with local actors.

Code	Actor Category	Organisational Affiliation/Role	Relation to Case	Perspective Type
P1	Initiative Initiator	Member of peer_protocol foundation	Co-founder of TheSpace and The Quest	Internal/organiser
P2	Initiative Collaborator	Architect and designer	Collaborator of TheSpace and co-leader of The Quest	Internal/reflective practitioner
P3	Social Housing Corporation Representative	Asset manager, Woonbron	Managed IJzerblok's redevelopment	Institutional/property management
P4	Municipal Project Manager	Municipality of Rotterdam	Oversees Coolhaven development	Institutional/policy implementation
P5	Neighbourhood Networker	Municipality of Rotterdam (Delfshaven)	Connects residents and municipal departments	Institutional/intermediary
P6	Local Resident	Coolhaven inhabitant (10+ years)	Observer and occasional participant	External/citizen perspective

The interviews were analysed using the AMO framework to capture how each dimension manifested within Coolhaven's evolving urban conditions. The findings consider the neighbourhood's ongoing transformation, as well as the institutional and urban context. This illustrates how governance structures, redevelopment processes, and resource channels shaped the scope and conditions for community-led co-creation.

Three interrelated themes structure the analysis: (a) Context and Access, examining conditions that enabled or constrained participation; (b) Practice and Membership, focusing on everyday collaboration and learning; and (c) Ownership and Legacy, exploring how temporary practices generated enduring forms of value and recognition.

5.2.1. Context and Access

Municipal and housing association representatives describe Coolhaven as "a microcosm of Rotterdam's social diversity," where long-term residents, international students, and new professionals coexist yet seldom interact. As P6 observed, "People live side by side but not together—we have diversity without mixing."

Access to TheSpace was obtained informally through personal networks, reflecting the ambiguous governance of IJzerblok. As P1 recalled, "I got the key through people loosely managing it at the time—it wasn't official, more like anti-squat without being formal." For the initiators, this informality represented a rare opening for experimentation and collective use. The housing association, however, viewed temporary use mainly as a risk-management measure to deter squatting and maintain oversight of vacant property. Municipal actors recognised the social value of such initiatives but described their own role as limited to short-term facilitation. The municipality often owns or oversees vacant industrial sites and works with partners to curate creative tenants and manage community use. Local officers, like those based at the *Wijkhub* (municipality's neighbourhood hub), handle micro-grant schemes that support neighbourhood events and temporary activations, funding small projects with minimal bureaucracy and modest budgets. P5 stated: "We support initiatives through low-threshold micro-grants—really from the neighbourhood, for the neighbourhood—so people can start something themselves." These programs, however, still remain peripheral to the city's long-term development agenda.

Following the closure of TheSpace, The Quest operated nomadically through workshops and public events in different parts of Coolhaven, engaging diverse actors around questions of shared urban futures. The attention shifted from property to process: from the right to use a space towards the collective capacity to convene, connect, and articulate local knowledge within institutional settings.

During both phases, community actors relied on informal infrastructures such as personal relationships, social media, and micro-grants to sustain engagement, compensating for the absence of formal inclusion channels. Interviewees frequently noted that channels between community actors and institutions were fragmented, often reduced to digital exchanges that replaced previous face-to-face contact. Local resident (P6) notes: "On paper it all looks wonderful—participation, engagement—but in practice, it doesn't really happen. It's almost impossible to reach anyone. Also, there's just a general email address—everything is digital now." Within this environment, community actors relied on informal means like personal encounters, social media, and small grants to sustain participation. These improvised strategies compensated for the lack of formal mechanisms of inclusion and the absence of lasting institutional pathways.

Finally, municipal actors expressed a desire for more resident-led proposals rather than participation framed primarily as consultation. One municipal project manager emphasised:

> I hope to see more young people taking initiative—coming to us with ideas rather than waiting for us to invite them. We'd love to react to citizen energy instead of driving it ourselves. That's the future of real participation.

Across these dynamics, access in Coolhaven depended less on formal policy instruments than on temporary alignments of opportunity and trust. TheSpace functioned as a spatial and relational interstice, enabled by

institutional gaps but constrained by the short-term frameworks of temporary urbanism. The Quest extended this logic beyond a fixed location, transforming access into the collective capacity to gather and act within a changing urban landscape.

5.2.2. Practice and Membership

Within TheSpace, participation developed through everyday practice rather than formal organisation. Roles emerged organically as members contributed time, skills, or materials, creating a fluid structure of involvement. Collaborator P2 confirmed this, noting the structure started "very flexibly, without much formal structure," based on a "mutual sense of experimentation, openness, respect, and a desire to co-create." The composition of participants was diverse, with P2 noting that it included "some former residents who kept coming and found belonging," suggesting that TheSpace successfully created a network that transcended the neighbourhood's social fragmentation.

The Quest's flexible organisation allowed engagement to adapt to changing circumstances. As P1 recalled from the earlier phase, "We invited others to use the space—concerts, dinners, meetings—anyone could propose something," a logic that continued into The Quest's programming even without a physical base. On the other hand, the same openness that once enabled experimentation continued to depend on the voluntary energy of a few core actors.

Across both initiatives, membership relied on shared purpose and recurring encounters rather than formal roles or contracts, reflecting a mode of community governance grounded in practice and learning, rather than regulation.

From an institutional perspective, such self-organised practices were seen as valuable yet difficult to reconcile with formal participation frameworks. Municipal staff described initiatives like TheSpace as socially enriching but hard to sustain within project-based timelines and administrative protocols. Housing representatives noted that while informal engagement created community energy, it rarely translated into recognised partnerships or influence over redevelopment decisions.

5.2.3. Ownership and Legacy

Ownership across TheSpace and The Quest was largely symbolic and procedural rather than legal or material. At TheSpace, there were no contracts or tenure rights—members operated on trust, maintaining the apartment through collective repair, reuse, and care. This stewardship generated a strong sense of belonging, even in the absence of property control. Participants described "doing the maximum with the minimum" as part of the ethos, where care for the space itself became a mode of authorship. Housing association representatives acknowledged this civic energy but stressed that temporary users "must understand the limits of permission," as demolition schedules and compliance rules ultimately determined duration.

Municipal actors framed ownership differently, emphasising the balance between autonomy and accountability. They support community-led activities when these fit within safety and zoning frameworks but cannot extend that support indefinitely. As one manager explained, the municipality can provide affordable space or short leases but "not permanent subsidies." This highlights a structural asymmetry: Civic

actors produce social value through care and initiative, but formal ownership and the ability to shape long-term outcomes remains institutional.

In The Quest, ownership was redefined through narrative and continuity rather than space. Without a physical base, participants "owned" the process of convening, documenting, and transmitting the methods developed earlier. This included maintaining visibility through social media, partnerships, and public events that extended TheSpace's legacy into new contexts. Ownership thus shifted from control over property to the capacity to hold and circulate knowledge, networks, and stories. It marked a transition from possessing a place to sustaining prefigurative commons of practice, an ongoing, distributed form of stewardship within Coolhaven's changing urban fabric, albeit reduced in frequency of activity.

6. Discussion

6.1. AMO in Common

The analysis highlights that membership in this CLI was enacted through practice and proximity rather than formal affiliation, thereby enriching debates on who "counts" as a commoner. Consistent with Foster and Iaione's (2019) emphasis on civic participation and ongoing engagement, membership at TheSpace and The Quest was fluid, layered, and situational: Actors moved between roles as organisers, contributors, collaborators, and guests, while learning-by-doing built shared capacities over time. This practice-based membership enabled the initiative to weave together diverse skills—artistic, organisational, spatial, and technical—into a temporary but powerful collective agency. However, the same informality that fostered openness also produced vulnerabilities already noted in commons literature: reliance on a small core, burnout, uneven responsibility, and limited representation of less confident or less culturally "fluent" residents (Boonstra & Boelens, 2011; Marella, 2017).

Ownership in the AMO sense—understood as control, authorship, and value distribution rather than only legal title—remained the most constrained dimension, and thus the key frontier for future transformation. TheSpace exemplified "ownership through care" (Iaione, 2016): Participants collectively maintained, programmed, and narrated a place they did not legally own, generating social, cultural, and reputational value for the neighbourhood and institutions involved. Yet, when redevelopment advanced, this de facto stewardship did not translate into influence, long-term tenure, or shared decision rights, echoing De Angelis's (2017b) concerns about enclosure of commoning gains and Harvey's (2012) critique of urbanisation driven by property value rather than use value. The Quest partly reassembled ownership as narrative and methodological continuity, keeping alive a situated knowledge commons.

6.2. Urban Practices Continuum

Across this time, the actor-groups have shaped a place that is best understood as a common space. Within a level planning field, as contextualised in Figure 6, the developing initiatives represent an intermittent practice. With their contributions being contiguous to place-shaping, these four actors relate to different governance and policy arrangements. Their comparable efforts could be part of an integral value formative process for the neighbourhood and of the Hart van Coolhaven project.

Whilst visually expressed as convergence in Figure 6, all actors have developed a vision through alternating forms of assembly, decisions, and documentation. It is noticeable that a residents' committee or council did not emerge. The legal procedure has been loosely followed without agonistic decisions and is concluded in a reduced configuration. As it stands, there is no Hart van Coolhaven building yet for social housing residents to return. With each actor attuned to its own process, their contradictions are tied. Despite The Quest's renewed prefigurative potential, its broader integrative ambition remains unrealised—at least until a wider range of values is acknowledged within urban development practices.

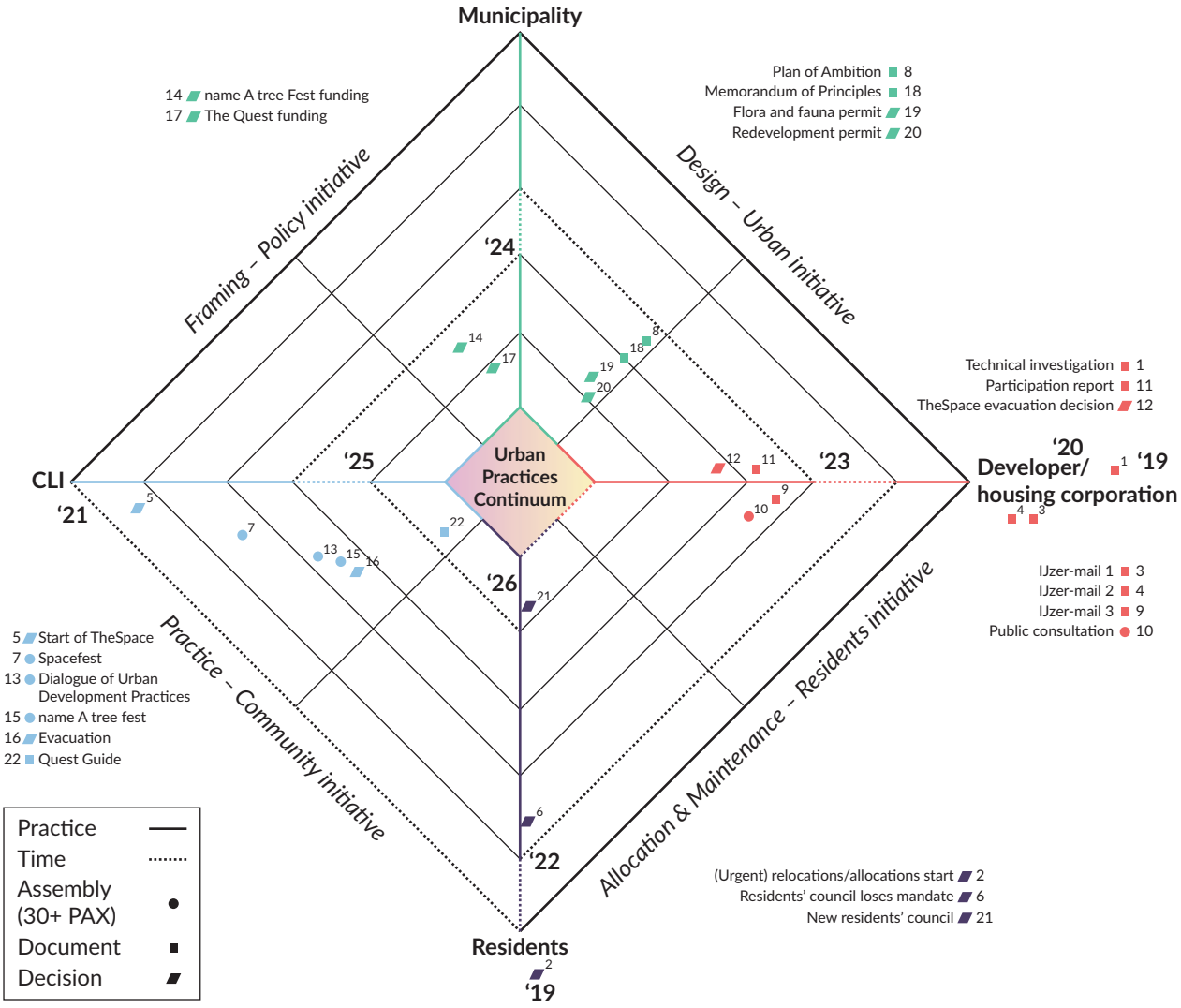


Figure 6. Urban practices continuum: converging practices in time and space. Note: Coloured by actor group and chronologically numbered. Source: Elaboration by the authors based on data from The Quest's repository.

7. Conclusion

CLIs, as found in this article, create their own distinct context, but they are not unique. Making this visible helps position them as credible proposals for transformation. This article has examined how CLIs can contribute to urban development not only as temporary cultural activities, but as evolving infrastructures of access, membership, and ownership.

Through the cases of TheSpace and The Quest, the study demonstrates that CLIs can generate social value, local knowledge, and collective capacity across different spatial and temporal conditions. When a fixed place was available, TheSpace enabled everyday commoning through shared use, care, programming, and encounter. After its closure, The Quest transformed this spatial commons into a nomadic process, sustaining networks, narratives, and participatory practices within the neighbourhood.

Analysing the data by applying the AMO framework highlights that access was enabled through temporary openings and informal trust; membership emerged through practice and recurring participation; and ownership developed as the most fragile dimension. Despite community actors producing social, cultural, and spatial value, they had limited control over long-term decisions, tenure, and redevelopment outcomes. This reveals a persistent gap between the recognised value of CLIs and their actual integration into urban development processes.

The low recognition of continuity mirrors broader critiques of participation in the Dutch context, where legally mandated participation rarely leads to shared authorship of urban development strategies. CLIs contribute to urban development by fostering a culture of proximity. Through their methods of organising a (persistent) practice, they can accumulate shared (access, membership, or ownership) resources over time, such as networks, spaces, objects, etc. The three highlighted examples from the event Dialogue øf Urban Development Practices can be said to propose reconfigurations of the urban environment. Their prefigurative practices have, even if only nominally, constituted possibilities. They remain prefigurative practices as long as they maintain a shared culture and enable informal participation in urban development.

The presented cases suggest that for CLIs to thrive over time, they require more than temporary permission or symbolic participation. They need durable channels of institutional recognition, flexible resources, continuity of space or process, and mechanisms through which community-generated value can influence planning decisions. Rather than treating bottom-up initiatives as episodic contributions, urban development must learn to engage them as long-term partners. Time after time, the challenge is not to invite participation, but to create the conditions through which commoning practices can endure, adapt, and spontaneously co-produce urban futures.

TheSpace and The Quest remained prefigurative rather than reconfigurative. No institutional mechanism (e.g., right to challenge, shared purchase, community land trust) was activated to lock in the CLI's contribution in the Coolhaven development process. This points to a crucial implication of the study: If CLIs are to move from temporary enrichment to co-creation, then governance, planning, and housing frameworks must be redesigned to recognise commons-based stewardship as a legitimate basis for negotiating longer-term access, hybrid ownership arrangements, and structured roles in urban development trajectories. This includes shaping participatory alternatives for urban development practices that recognise the benefits of such inclusive and ecological approaches.

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Conflict of Interests

The authors declare no conflict of interests. In this article, editorial decisions were undertaken by Hilde Remøy (TU Delft).

Data Availability

The data collected as part of the Coolhaven Beating Heart Participatory Quest are publicly available in The Quest Repository Zotero group library: https://www.zotero.org/groups/5923933/coolhaven_beating_heart_participatory_quest/library

LLMs Disclosure

During the preparation of this work, the authors used ChatGPT 5.1 and Grammarly to improve the clarity of the English writing.

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ARTICLE

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Caring Temporalities: The Role of Urban Space for the Liveability of Fluidly Housed Youth

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Abstract

This article explores the role public space plays in providing care for fluidly housed youth. These young adults are experiencing fluctuating conditions of homelessness, moving between couch-surfing, staying in overcrowded or informally occupied spaces, and sometimes experiencing periods of rooflessness. Using an adapted typology of homelessness and building on fundamental human needs and the process of homemaking in public, the article identifies three overarching socio-spatial needs of fluidly housed youth. Through a mixed-methods approach, the article uncovers three spatial potentials that afford fluidly housed youth to activate and adapt urban space through processes of radical care, and identifies urban spaces suitable to build infrastructures of care that afford meeting needs along a gradient of privacy. This way, it links socio-spatial needs, socio-spatial affordances, and the processes of care that connect both. In understanding this logic, it gives examples for careful planning that creates urban space affordances that activate and adapt to shifting needs. While this article does not claim to solve the housing crisis, it offers a starting point for how we can centre everyday practices of fluidly housed youth and create infrastructures of care that can better afford to meet shifting needs in urban space.

Keywords

careful planning; everyday needs; fluidly housed; infrastructure of care; socio-spatial relations; spatial affordance; youth homelessness

1. Introduction: Youth Homelessness as a Crisis of Care

Globally, youth homelessness is on the rise ("Ending youth homelessness," 2021; European Federation of National Organisations Working with the Homeless [FEANTSA], 2023, 2024), representing one manifestation of a broader crisis of care that limits young people's agency over their daily lives. Despite

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renewed commitments to eradicate homelessness by 2030 (European Commission, 2024), significant gaps remain in how housing precarity is defined, measured, and governed. Genuine commitments to ending homelessness are limited, and awareness of the lived realities of both visible and hidden forms of homelessness remains low within political discourse and the broader public (FEANTSA, 2007). The pathways into homelessness are as diverse as the people affected. Structural factors, such as poverty, a lack of affordable housing, and weakened welfare systems, intersect with personal, relational, and institutional vulnerabilities. Importantly, there is no single "type" of person who becomes homeless. While middle-aged, single men still represent a substantial portion of service users, increasing numbers of women, migrants, families, and young people are affected (Euro Cities, 2023; FEANTSA, 2024). FEANTSA aims to bring this topic to the agenda and has broadened the understanding of homelessness through its European Typology of Homelessness and Housing Exclusion (ETHOS). ETHOS includes rooflessness, houselessness, insecure housing, and inadequate housing, as illustrated in Figure 1 (FEANTSA, 2007). While this typology challenges narrow stereotypes and makes hidden homelessness visible, it does not fully capture the fluctuating condition of homelessness that particularly young, unhoused people face. These include constantly moving by staying with friends, occupying abandoned buildings, living in overcrowding, and sleeping rough, while facing shifting layers of stigma and exclusion. To better reflect this lived reality, while avoiding the stigma associated with the term "homeless," we use the term *fluidly housed youth* (Stadtlander, 2025).

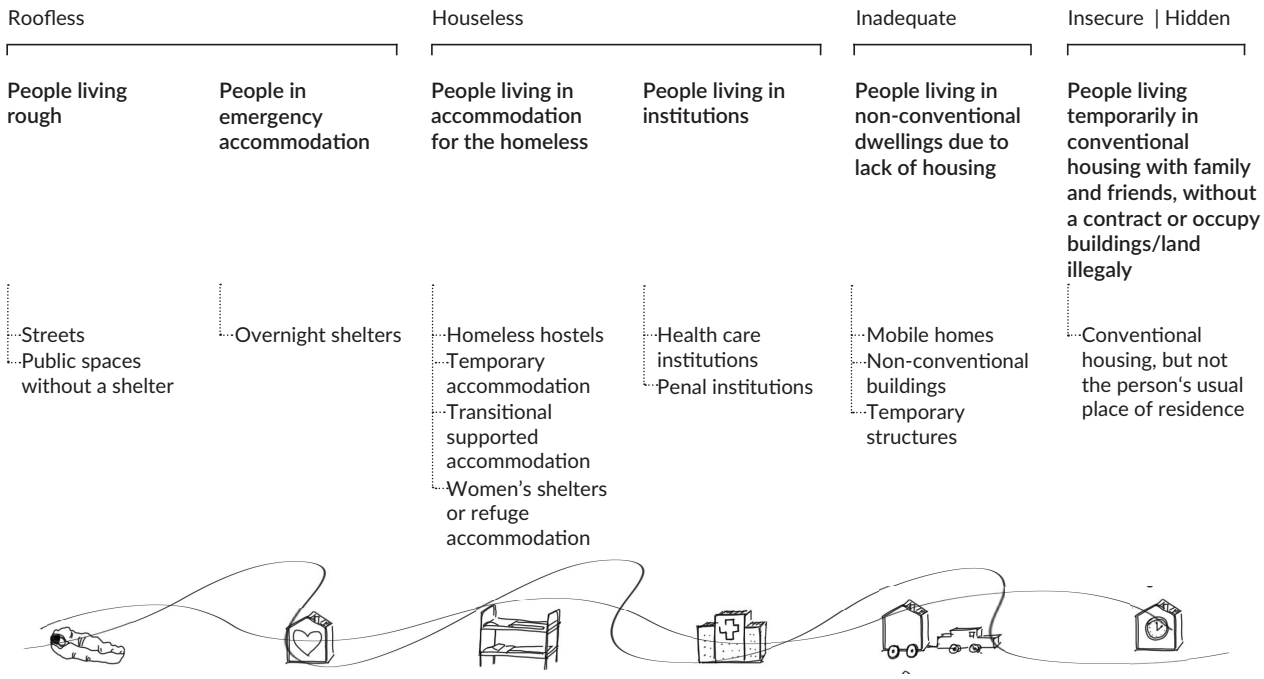


Figure 1. Fluctuating conditions of homelessness based on ETHOS light. Source: own work based on FEANTSA (2007).

For this highly diverse and heterogeneous group, exclusion from access to stable housing means not only lacking a roof over their heads but also being denied spaces for privacy, intimacy, hygiene, and community (Schneider, 2024). Living *fluidly* frequently entails having no reliable means to prepare food or register an address to receive mail, which in turn restricts access to basic services such as voting and other forms of civic participation, severely limiting the ability to care for oneself and society.

These structural exclusions are further intensified by age. Youth is understood here as a relational category situated between childhood and adulthood, shaped by the overlapping transformations of puberty and adolescence. Fluidly housed youth may be perfectly capable of making decisions about their own lives; yet, legal restrictions, such as being prohibited from signing a rental contract until reaching the age of legal adulthood, frequently limit their autonomy and make them dependent on forms of care provided by others. But these others are not always available to fluidly housed youth.

1.1. Case Study Brussels – "Poverty Crescent" as Starting Point

While this research provides insights that can be adapted and implemented in a wider context, our insights have been focused on the context of Brussels. This was an important starting point, as Brussels itself is a highly complex city, bringing together fragmented governance structures and actors at multiple levels (Brussels Capital Region, 2024). The increasing inequality in the city, where contrasting international wealth and increasing poverty and social exclusion are framed as the "Brussels paradox" (Carolan, 2024), is especially visible in the area referred to as "Croissant Pauvre" (Joie et al., 2022), which can be translated as "Poverty Crescent." This area, shaped like a crescent that wraps around the inner-city Pentagon and extends toward the northwest, comprises parts of 6 of the 19 municipalities in Brussels. This area faces several overlapping challenges, including high unemployment rates, housing insecurity, overcrowding, poor air quality, and a lack of green space (see Figure 2; Brussels Instituut voor Statistik en Analysis, 2022; Joie et al.,

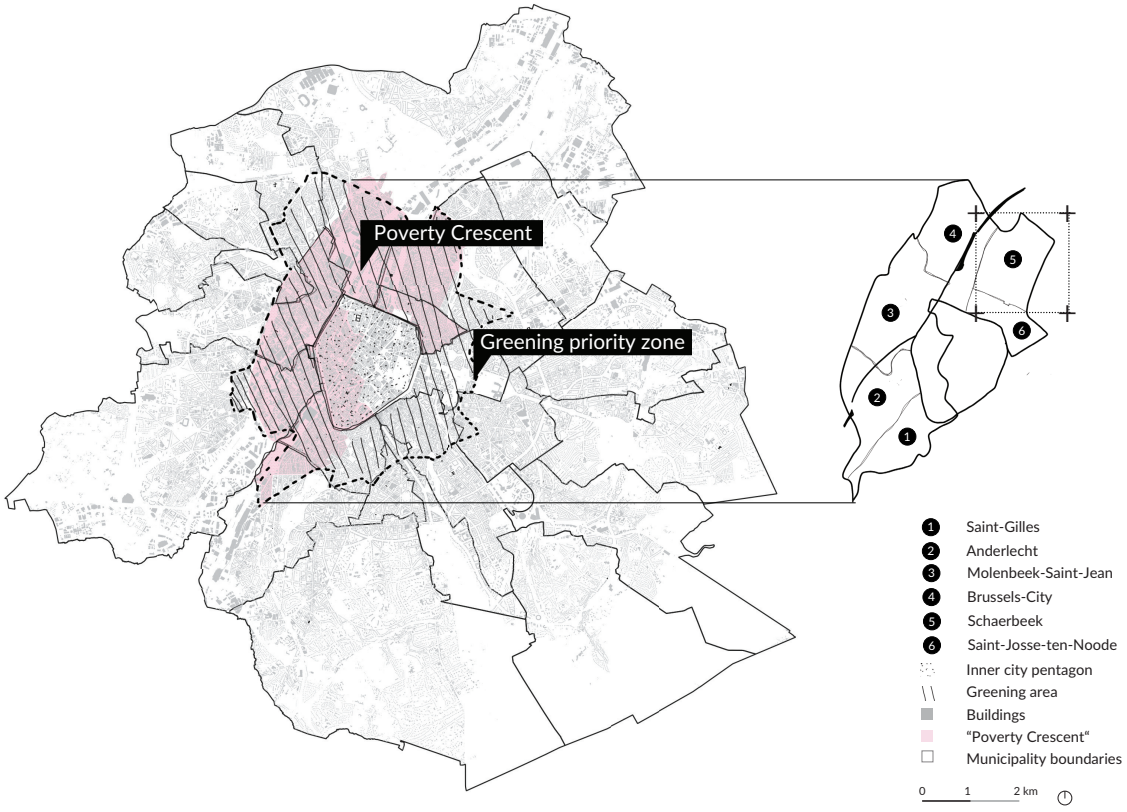


Figure 2. Map showing the "Croissant Pauvre" in Brussels, where marginalised individuals and a lack of green space highlight gaps in institutional care. Source: own work, based on socio-demographic data (Brussels Instituut voor Statistik en Analysis, 2022; Joie et al., 2022), and data sets (Datastore.Brussels, 2024; Opendatasoft, n.d.; OpenStreetMap, n.d.).

2022; Van Criekingen, 2006). These issues highlight gaps in institutional care and illustrate structural and systemic neglect. Consequently, Brussels has become a city in which residents, collectives, and informal groups are actively reclaiming and reconfiguring urban space to provide informal care structures and meet everyday needs.

1.2. Spatial Care for Fluidly Housed Youth

In times when institutional strategies move too slowly to address the urgency of the housing crisis, it becomes important to understand how "urban space is produced through (caring or uncaring) spatial practices and social relations" (Gabauer et al., 2021, p. 6). Rather than focusing on monetary value creation, which is a common driver of gentrification, we use insights from mixed methods to advocate for a shift in value creation toward a more anthropological and relational assessment of value (Gould et al., 2024; Graeber, 2001) rooted in practices of radical care (Miraftab, 2022, 2023; Miraftab & Huq, 2024; Sheringham, 2025).

Drawing on Fisher and Tronto (1990), we understand care not as a narrow term that often refers to unpaid labour work but as a relational and political practice that extends outside the private realm into public space and includes "everything we do to maintain, continue, and repair our 'world' so that we can live in it as well as possible" (p. 40). In line with Miraftab's (2022, 2023) and Miraftab and Huq's (2024) understanding of radical care, we do not view this as a romantic term, but as a practice that aspires to perform "life and life-making" without focusing on profit or reproducing oppressive structures. Therefore, care in this article describes the ongoing socio-spatial practices of fluidly housed youth to activate and adapt the urban fabric to meet needs under changing conditions. This way, the lens of care helps us to understand existing power imbalances embedded in the built environment and to gain insights into how social, material, and emotional networks can be reimagined to form "infrastructures of care" that include invisible and everyday practices (Sánchez, 2023) of fluidly housed youth and help to disrupt and contest neoliberal logics embedded in urban space in pluralistic, evolving ways across multiple scales (Sheringham, 2025; Strüver & Franz, 2025).

This article proceeds in three analytical steps. First, we reconceptualise youth homelessness as *fluid housing* and identify socio-spatial needs resulting from this lived reality. Then, we examine how these needs are met in urban space through everyday practices of care and identify three resulting socio-spatial typologies. Finally, we categorise urban spaces according to their capacity to embed these socio-spatial typologies to form two connected infrastructures of care.

2. Methodology and Research Design

This research employs a mixed-methods approach (Creswell, 2002) to triangulate socio-spatial needs, everyday practices of care, and affordances of urban space. By combining quantitative and qualitative methods, we build an interdisciplinary, layered understanding of these spaces and practices and embrace research by design as both a mode of knowledge production and a political act of care. Rather than producing fixed representations, design operates iteratively through reflection-in-action (Dorst & Cross, 2001; Lloyd, 2019), with spatial interventions functioning as projective hypotheses that both emerge from and produce analytical findings. This integrative approach is essential because fluid housing represents a "wicked problem" (Rittel & Webber, 1973): complex, difficult to define, and not solvable through a single solution.

This approach unfolds across temporal scales: Analytical methods examine how socio-spatial conditions have emerged, fieldwork uncovers lived experiences in the present, and design explorations, informed by contested methods (Fezer, 2022) and critical design (Dunne & Raby, 2013), generate plural imaginaries to open up alternative futures. By combining iterative and speculative processes, problem framing and spatial configuration co-evolve, allowing us to test how different combinations of spatial patterns influence behaviour, liveability, and practices of care, ultimately producing actionable analytical insights. Throughout the process, method triangulation reduces bias but also honours the plurality of voices, data, and ways of knowing involved. It allows us to connect bottom-up practices to meet everyday needs with insights for top-down planning.

To identify the socio-spatial needs of our focus group, we combined findings from literature (Boccagni & Duyvendak, 2021; Max-Neef, 1991) with insights from informal conversations with seven individuals approached on the streets. These conversations were open-ended and focused mainly on the housing situation, as well as places and activities that are important to these young individuals. To maintain privacy while showcasing diverse living situations and needs, we synthesised these insights into four personas, illustrated through short graphic novels and time-geography mapping (Hägerstrand, 1970). These representations give insights into spatial trajectories and socio-spatial needs along a gradient of privacy.

During multiple fieldwork visits, we explored the "Poverty Crescent" in Brussels, focusing further on Schaerbeek West, using ethnographic mapping. This qualitative research method combines the study of people through observation and participation with spatial analysis (Martin, 2020; Pelto, 2013). It helped us to examine socio-spatial practices of care that aim to meet everyday needs of fluidly housed youth and understand how urban space affords or disaffords them (Gibson, 1986).

To relate socio-spatial needs to spatial settings, we applied street network centrality analysis (Hillier & Hanson, 1984), identifying street types according to degrees of publicness at multiple scales. Through iterative comparison, we mapped relationships among socio-spatial needs, street typologies, and active care practices. These relationships were further structured as patterns (Alexander et al., 1977), linking lived experiences to spatial affordances. Using the pattern language methodology introduced by Alexander et al. (1977), we integrated socio-spatial needs, ethnographic mapping, and morphological analysis across scales, giving insights into how urban planning can become more careful and adaptable to changing needs.

3. Meeting Needs in Urban Space as a Form of Radical Care

This section reveals the socio-spatial needs of fluidly housed youth related to homemaking in public space and examines the role urban space plays in affording or hindering the ability to meet these needs. Here, the processes through which the urban fabric is activated are reframed as active practices of radical care (Fisher & Tronto, 1990; Miraftab, 2022, 2023; Miraftab & Huq, 2024). This helps us understand which socio-spatial settings operate as caring or uncaring by design (Gabauer et al., 2021). Therefore, we can see how planning itself can become careful and intentionally include socio-spatial affordances that provide the potential for fluidly housed youth to activate and adapt them to meet their shifting needs through processes of radical care.

3.1. Fundamental Needs and Homemaking in Public Space

To operationalise practices of radical care, we first need to understand the socio-spatial needs of fluidly housed youth. To do this, we overlay the theory of fundamental human needs (Max-Neef, 1991) with the active process of "homemaking in public space" (Boccagni & Duyvendak, 2021).

Emphasising the fulfilment of basic human needs, Max-Neef (1991) identifies nine universal, non-hierarchical needs that persist across cultures and historical contexts: subsistence, protection, affection, understanding, participation, leisure, creation, identity, and freedom. Importantly, these needs are distinct from satisfiers, which describe the ways in which needs are met. While satisfiers related to subsistence, such as food and shelter, are foundational, all nine needs are equally essential for human well-being. While the nine fundamental needs are universal, satisfiers vary by context, culture, and history, making it crucial to identify the satisfiers relevant for each demographic in each context. For example, for youth, social recognition as valued members of society (Erikson, 1968; Honneth, 1995; Marcia, 1966) and experiences of resonance, where their presence and expressions elicit meaningful responses from their surroundings and others (Rosa, 2019), are important.

The concept of home is commonly defined as a private space for rest, hygiene, and intimacy (Boccagni & Duyvendak, 2021; Home, n.d.). For fluidly housed youth who are excluded from stable housing, urban space becomes increasingly important for meeting their fundamental needs. Therefore, we must rethink our perception of a "home" as a fixed place with four walls and consider the emotions that facilitate the process of creating a home instead. Boccagni and Duyvendak (2021) identify three critical emotions that enable marginalised groups to establish a sense of home in public spaces: security (both material and symbolic; Dupuis & Thorns, 1998; Giddens, 1991), familiarity (built through routines and repeated use; Kuurne & Gómez, 2019), and control over daily life, which public spaces can either enable or restrict.

Overlaying Max-Neef's framework with emotions associated with homemaking in public spaces and the systemic barriers that fluidly housed youth face reveals the importance of relational and spatial environments in meeting these needs every day. Therefore, we identified three overarching socio-spatial needs that urban planning must address to enable fluidly housed youth to improve liveability to the fullest extent possible: Health and Security, Community and Solidarity, and Autonomy and Agency (see Figure 3).

These categories do not replace Max-Neef's typology but serve as spatially grounded clusters that allow us to examine how fundamental needs are negotiated within urban space.

Health and Security corresponds primarily to Max-Neef's category of subsistence and protection, as well as Boccagni and Duyvendak's emotion of security, and is not necessarily related to youth in particular, but more to the understanding that everyone requires access to a safe place to rest, nutritious food, clean water, hygiene facilities, and protection from violence or harassment. For fluidly housed youth, these needs are often precarious or unmet.

Community and Solidarity is based on the idea that peer relationships are important during adolescence (Allen et al., 2018; Honneth, 1995), especially when family support is absent. These relationships reflect Max-Neef's (1991) needs for affection, identity, and participation, and are closely tied to familiarity (Boccagni & Duyvendak, 2021), and underscore the importance to plan urban spaces that afford fluidly housed youth to meet this socio-spatial need.

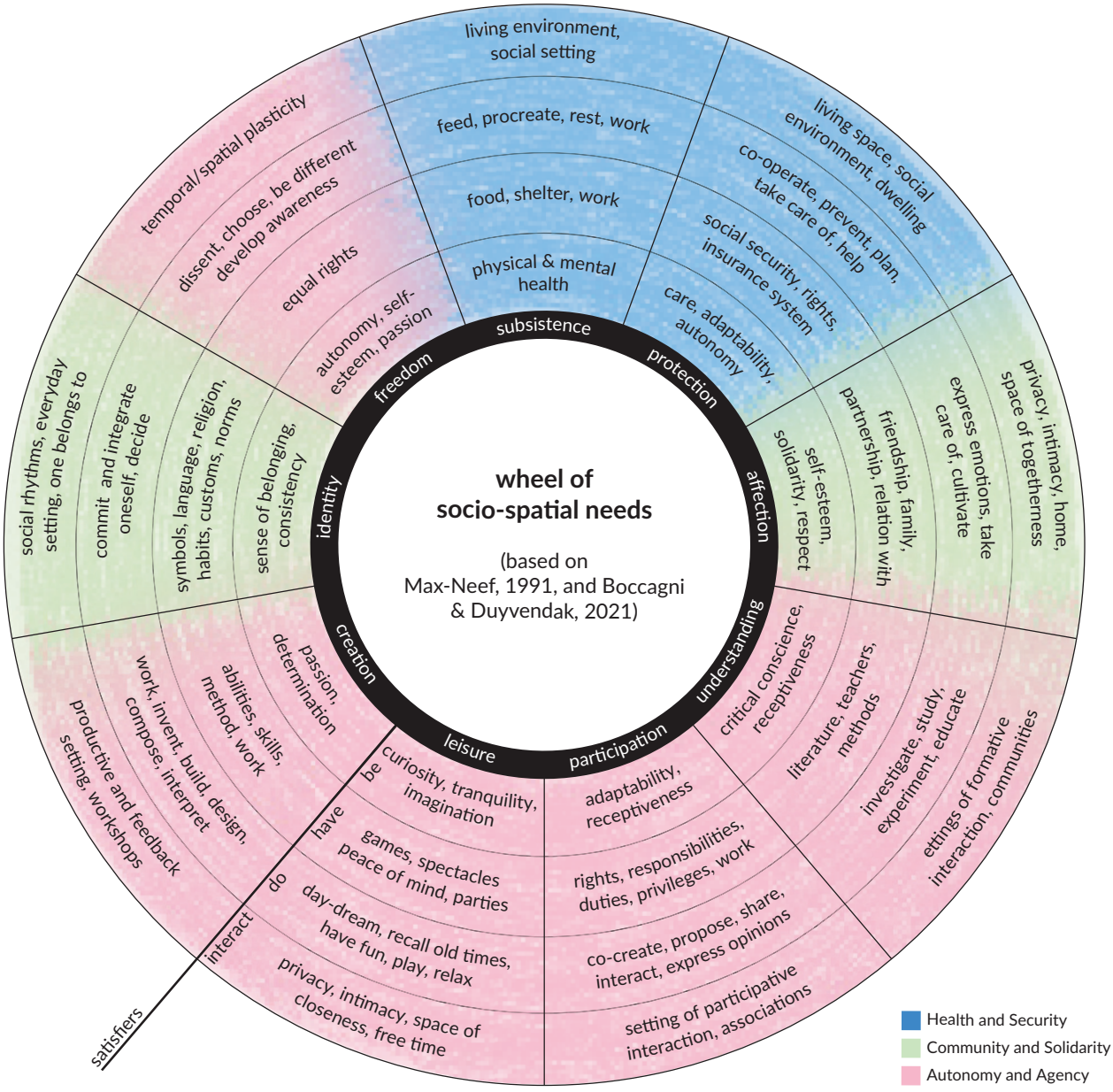


Figure 3. Wheel of socio-spatial needs. Source: own work, based on Boccagni and Duyvendak (2021), Max-Neef (1991), and informal conversations.

Autonomy and Agency is based on the understanding that, for youth, experiencing the tangible effects of their actions is crucial (Rosa, 2019; Rose et al., 2016). This aligns with Max-Neef's (1991) categories of freedom, understanding, participation, and creation. It also relates to having a sense of control over one's daily life (Boccagni & Duyvendak, 2021). This highlights the importance of creating urban spaces that afford fluidly housed youth the ability to influence their surroundings and make decisions that improve their liveability.

3.2. Affordances and the Spatial Configurations of Care

To understand how these socio-spatial needs can be met in urban space through active processes of care, we draw on the notion of affordances. Introduced by Gibson (1986), it describes the possibilities for action that an

environment offers to an organism. While these possibilities exist in the environment independently of being acted upon, they acquire significance only when individuals can perceive and engage with them (Chemero, 2003, as cited in Marcus et al., 2016; Gibson, 1986, p. 127). Understanding how fluidly housed youth interact with space and with each other through space to meet their needs is therefore not only a social question but also an inherently spatial one, as these interactions both shape and are shaped by the built environment. Rather than viewing space as valuable only when activated, we propose reversing this logic and seeing space as valuable when it affords care, no matter if acted upon or not. To understand how to plan carefully, we therefore first need to understand what caring and uncaring urban space look like and how this relates to homemaking in urban space for fluidly housed youth.

Feeling at home in public space is not equally possible for everyone (Boccagni & Duyvendak, 2021). Especially minority groups, such as unhoused individuals, are often perceived as disturbing when trying to make a home in public space and behavioural codes, surveillance, and rules against sleeping or loitering in public space actively limit possibilities to meet needs related to homemaking in urban space (Minton, 2009). This way, the urban fabric becomes a tool that privileges certain users over others, often leading to the displacement, policing, and criminalisation of unhoused individuals (Smith, 1996). These inequities make the political nature of urban space explicit, as they determine who can access it, how long they can stay, and which activities are tolerated (and which are not). Therefore, they demonstrate where space is uncaring, and prevents homemaking for fluidly housed youth. Examples of such uncaring designs are illustrated in Figure 4 and include (but are not limited to) benches that disafford laying down for rest or later added fences, aiming to actively prevent roofless individuals from finding shelter there.



Disaffording Bench
preventing laying down

Fence
preventing access to sheltered space

Figure 4. Drawings showing uncaring architecture in Brussels.

Instead of asking how planning and design can prevent "undesirable" behaviour, we reverse the logic of behavioural regulation in planning and instead examine how spatial configurations provide the potential for practices of care to unfold, and how we can learn from these observations to plan more carefully.

4. Findings

4.1. Fluid Housing as Lived Reality

The informal conversations revealed that youth homelessness is not a fixed condition but a constant movement between different forms of housing exclusion, exposing gaps in existing definitions. Despite the participants' diverse backgrounds and, in some cases, traumatic experiences, a striking commonality emerged across their narratives: Each expressed the sentiment, "I'm not homeless, but…" This underlines a crucial discrepancy between the formal categorisations of homelessness and its lived reality.

The young adults, among them artists, undocumented youth, students, individuals not in education, and others working irregular jobs, shared a wide range of stories about their multifaceted lived experiences, summarised in Figure 5. Their daily lives were vastly different, yet all navigated unstable housing situations. Some said that the idea of a home was not something they aspired to. One person said, "For me, a home is not important. For you, maybe. But for me, the whole city is my home." Others had to leave home in the past and experienced stretches of rough sleeping, temporarily staying with friends or family, or finding a room in solidarity housing projects, where they did not need to pay for rent or food but frequently had to share their room with others and follow specific rules. Some had found temporary places that offered a sense of safety, such as squatted buildings or precarious rental agreements, but these were often insecure as they could be terminated at any time. Others lived in shared apartments but no longer felt at home due to social tensions, and wanted to leave, yet had no affordable alternatives in sight.



Figure 5. Fictive faces and real conversations with young people experiencing homelessness.

4.2. Temporal Patterns of the Everyday

Short graphic novels based on four personas helped us retain the privacy of the participants while capturing plural embodied, fluctuating, and resisting practices (Shahrokh, 2022; Sheringham, 2025) of everyday care of fluidly housed youth to meet shifting needs depending on their current housing status. Additionally, time geography (Hägerstrand, 1970) helped us understand and visualise the similarities and differences in the everyday spatial-temporal patterns of these personas based on their trajectories in physical space over time, as illustrated in Figure 6. All four personas actively engage in processes of care and agency, such as occupying buildings, creating informal governance structures, and challenging conventional forms of

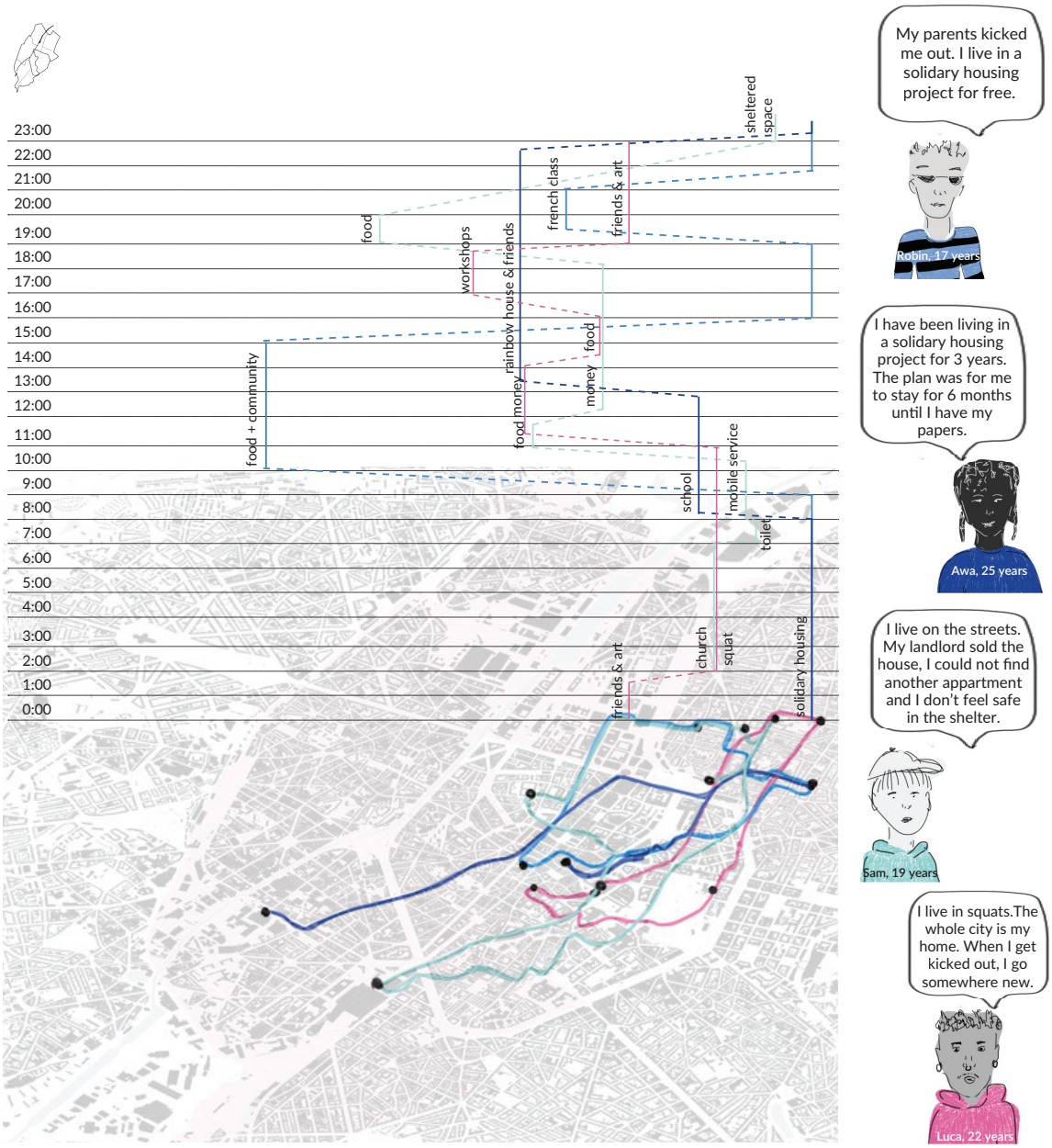


Figure 6. Fluid patterns of moving and staying of four personas, demonstrating one average day based on lived experience from seven fluidly housed youth in Brussels. Source: own work based on informal conversations and data from OpenStreetMap (n.d.).

cohabitation, highlighting their potential for self-determination. However, systemic barriers, such as the lack of a fixed address, limited access to spaces, and the absence of legal rights, often prevent them from fully participating as civic citizens. By overlapping their individual patterns of movement and staying, it becomes evident that the amount of time each individual spends moving versus staying in one place largely depends on their access to safe, welcoming spaces. For instance, Sam is constantly on the move, with limited opportunities to rest, while Robin benefits from access to places where they feel safe and can stay for longer periods. The paths of the four personas rarely intersect. This is because they are active at different times of day and often use the same spaces but in entirely different ways, shaped by their individual needs.

4.3. Everyday Spatial Practices of Care

Using ethnographic mapping, we explored Brussels' "Poverty Crescent" and specifically Schaerbeek West to understand how urban spaces are activated and adapted through active processes of care. By combining text and drawings (as illustrated in Figure 7), we identified a variety of socio-spatial interventions that demonstrate how urban space can be creatively repurposed to improve liveability for fluidly housed youth. Examples include colonnades that were used for retreat (1, 2); sheltered entrances equipped with multiple post-boxes (3); windowsills used to distribute free food (4); empty corners turned into gardens (5); water taps on the outside of facades (6); sheltered benches (7); power and water supply activated by mobile services to provide laundry services (8); and an underused market space with a nearby dishwasher converted into a community kitchen (9). Each of these interventions illustrates how spatial affordances create the potential for fluidly housed youth to activate and adapt urban space to meet their socio-spatial needs more easily.

In terms of Health and Security, we observed that sheltered structures, such as pavilions, eaves, and colonnades, coupled with seating or hammocks, invite rest and temporary retreat. People often prefer to rest in elevated areas, such as benches or stairs, to get an overview of their surroundings, which can provide a sense of security. Small pockets within the streetscape that are used in different ways become places where people share food. These include for example sheltered windowsills at key transition points. Additionally, empty corners are often transformed into community gardens, which provide free, healthy food and gathering places and make the street more lively. Water taps embedded in building facades provide a network of drinking water, which is crucial for everyday health and liveability.

Regarding Community and Solidarity, we observed that community kitchens invite people to gather and cook together, providing meals and repurposing underused spaces. These spaces foster deep solidarity among those who cook together and fleeting solidarity among those who simply come to eat (see also Rocco & Lopez, 2022). Public spaces and furniture designed to encourage face-to-face interaction can also foster both forms of solidarity. The arrangement of benches influences the degree of social interaction. Benches arranged opposite one another or in a circle encourage engagement, while benches arranged side-by-side often do not. This demonstrates how spatial design can encourage a sense of belonging without imposing it.

Additionally, small infrastructural elements in public spaces, such as post-boxes that could serve as addresses for registration, enable Autonomy and Agency. Plug-in power sockets in urban space could additionally afford a variety of uses. These include health-related mobile services, including laundries and showers, as well as both Community and Solidarity and Autonomy and Agency by enabling flexible use of the urban fabric for communal activities.

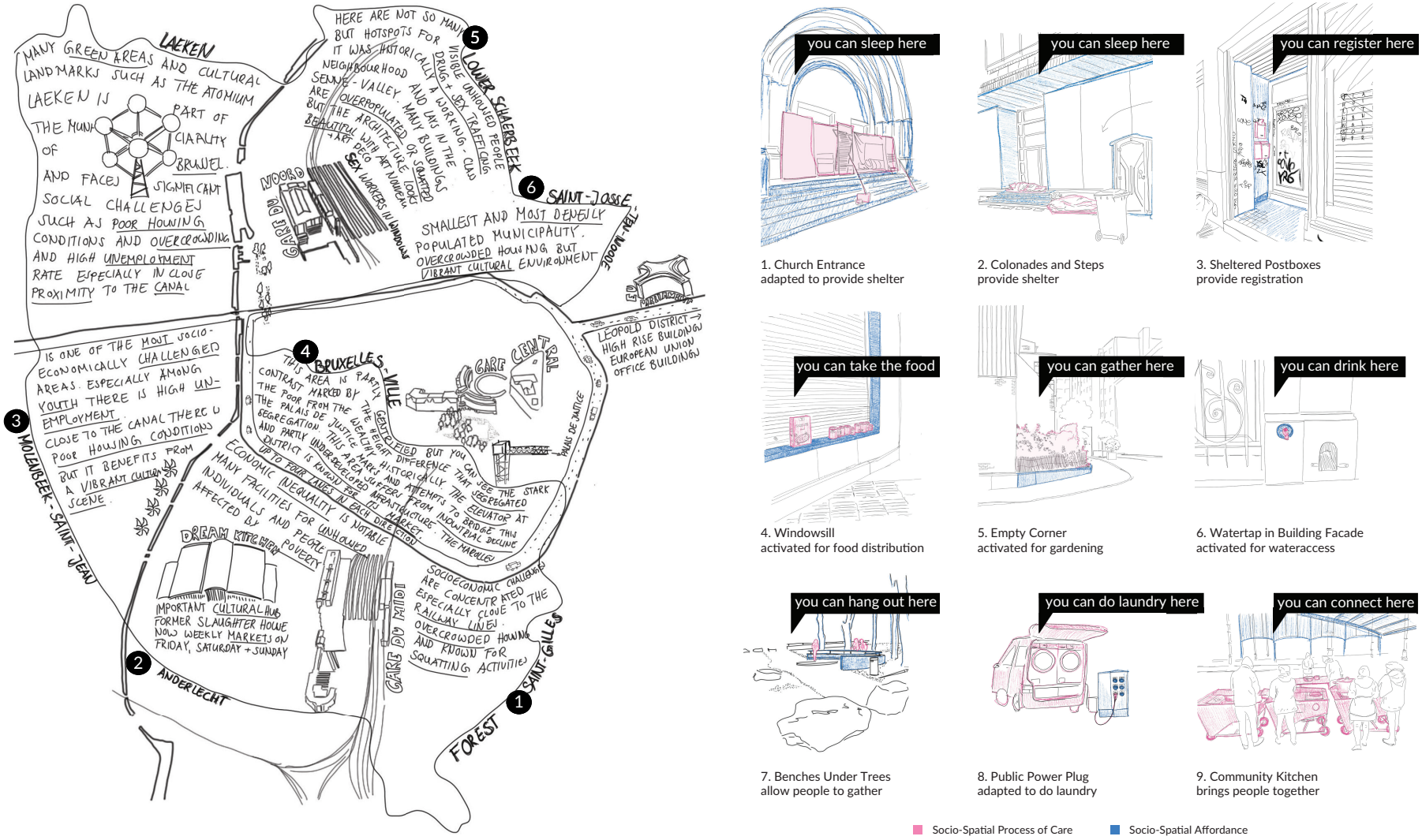


Figure 7. Observations from ethnographic mapping showing urban spaces that afford to meet different everyday needs, resulting in the identification of patterns of care. Socio-spatial affordances are highlighted in blue and socio-spatial processes of care in pink.

Looking at the systemic connections between practices of care and space, we could identify patterns (Alexander et al., 1977) that give insights into how fluidly housed youth repeatedly interact with space and with each other through it to meet their needs. This way, we distinguished three socio-spatial categories: Infrastructural Elements, Spatial Potentials, and Moveable Elements.

Infrastructural Elements are power plugs, hooks, and water taps which can be plugged in or out and therefore afford activation and adaptation in a bottom-up manner, if combined with Spatial Potentials, which provide spaces where people can gather, rest, or activate informal practices, such as sheltered setbacks in the streetscape. Moveable Elements are the ones that can be easily used to activate both Spatial Potentials and Infrastructural Elements. These include lockers, post-boxes, seating, hammocks, shower towers, mobile services (e.g., laundry), outdoor kitchens, or food-sharing fridges.

Combining these three categories can actively support the satisfaction of socio-spatial needs for Health and Security, Community and Solidarity, and Autonomy and Agency, and help improve the liveability of fluidly housed youth. However, to create a safe and healthy environment where fluidly housed youth actually feel comfortable acting on these affordances, we need to understand that not all socio-spatial needs can be met in the same urban spaces. Instead, we need a layered understanding that gives insights into which urban spaces provide the potential for activities that require a more private setting, and which ones provide the potential for a more public use.

4.4. Finding a Gradient of Privacy in the Street Network

The morphological analysis helped differentiate the suitability of urban space for meeting different needs along a gradient from introverted socio-spatial needs, which require more private and secluded settings, to ambivert socio-spatial needs, which benefit from a mix of privacy and social interaction, to extroverted socio-spatial needs, which are activated by public encounters and collective engagement.

Street network centrality analysis (Hillier & Hanson, 1984) allowed further insights into the spatial logic of the urban fabric. Importantly, this analysis does not depict specific locations where different everyday patterns of fluidly housed youth occur. Rather, it serves as a tool to operationalise the logic of how people interact with and navigate space based on the configuration of the built environment (Hillier & Iida, 2005; van Nes & Yamu, 2021). In this way, the analysis identifies spaces that may be suitable for spatial interventions capable of accommodating diverse needs, instead of exposing the current gathering locations of fluidly housed youth. Therefore, the map displayed in Figure 8 does not pose any direct risk to the focus group.

By overlaying the results of angular integration analysis, showing how easily a space can be reached within the network, and angular choice analysis, showing how likely a segment is to be used as part of a route (Hillier & Hanson, 1984; van Nes & Yamu, 2021), we categorised three types of urban spaces that afford different gradients of privacy—Destinations, Key Connectors and Transitional Spaces, and Unsuitable Spaces—as illustrated in Figure 8.

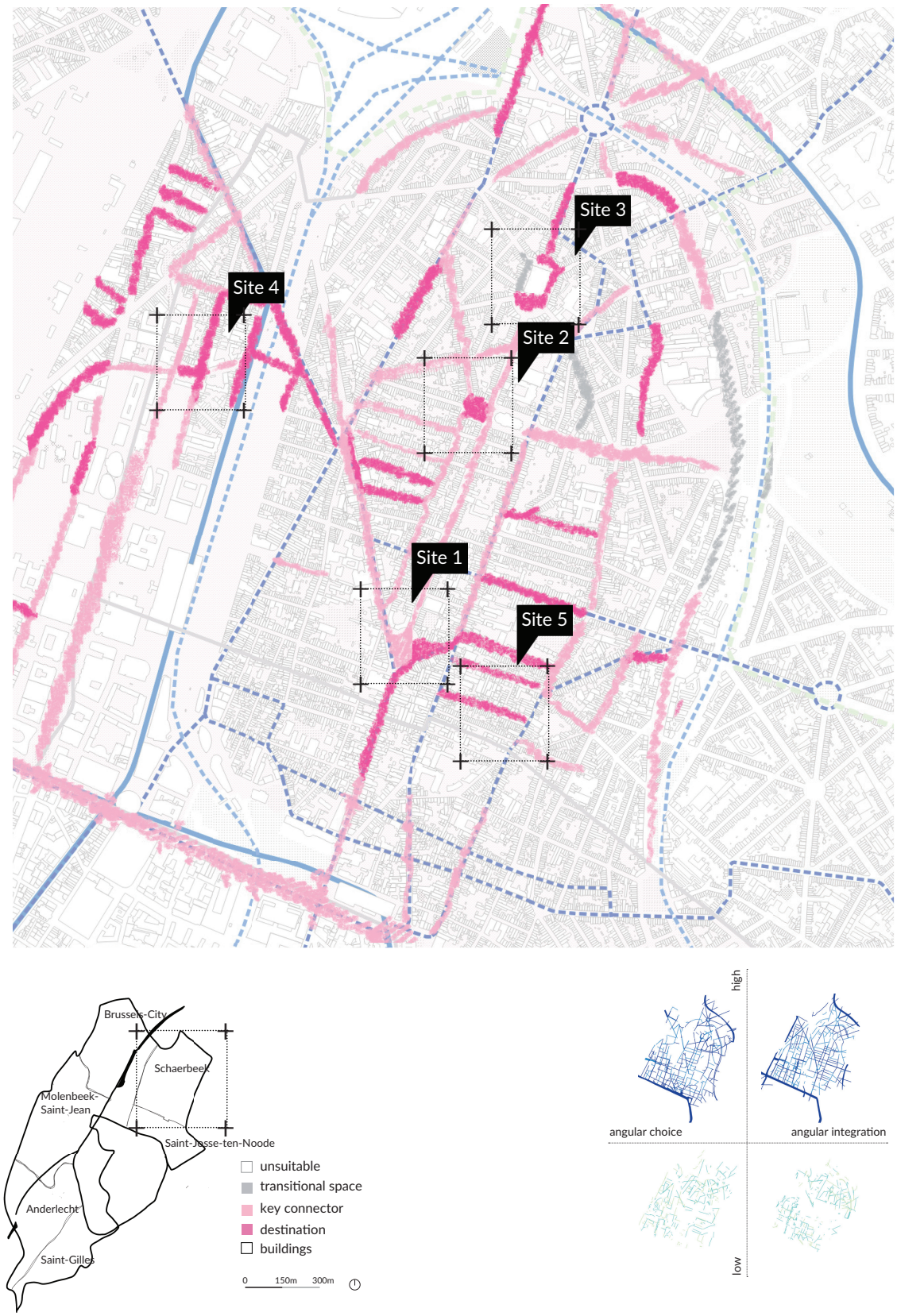


Figure 8. Street network centrality analysis in Schaerbeek West, overlaying angular choice and angular integration, reveals suitable spaces for interventions depending on degrees of privacy. Source: own work based on OpenStreetMap (n.d.).

Destinations (dark pink) are those urban spaces in the street network with low angular choice but high angular integration. These spaces are easily accessible but not as frequently passed through, making them ideal locations to foster a range of uses, from introverted to ambivert to extroverted. Those spaces include places for hygiene and rest that need more intimacy, as well as places that foster connection and mutual activities, such as eating and cooking together, and places for brief encounters.

Key Connectors (light pink) and Transitional Spaces (grey) are those urban spaces in the street network with high angular choice but low integration, as well as high angular integration and high angular choice. These spaces are frequently passed through; however, they do not invite people to stay and meet needs related to retreat and privacy. Therefore, they are mainly suitable for brief interactions that help build solidarity and for accommodating interventions related to green-blue networks or public toilets, which, while not specific to fluidly housed youth, enhance overall liveability.

Unsuitable Spaces are those urban spaces in the street network that show both low angular integration and angular choice, which means they are neither frequently used nor easily accessible, based on the logic of the urban fabric, which likely leads to isolation. While this might be perceived as suitable locations for retreat, shelter, rest, and hygiene at first, it is important to understand that these environments not only are quieter, but also lack passive surveillance, which affects perceptions of safety. While passive surveillance or security measures feel protective to some, they may feel oppressive or threatening to others, highlighting that perceptions of safety are highly subjective. Following Jacobs et al. (2015), spaces without "eyes on the street" can feel unsafe, especially for roofless individuals who are frequently exposed to attacks, including physical assault, being set on fire, or other forms of violence (e.g., Bloh, 2020). This highlights the need to intentionally choose suitable locations for interventions that genuinely improve liveability. Therefore, we argue for planning spaces that foster a gradient of uses, where fluidly housed youth and the wider public can meet and build both fleeting and lasting forms of solidarity, while fostering degrees of privacy and affording rest and shelter, without fear of being monitored, removed, criminalised, or even attacked.

5. Discussion: Toward Two Complementary Infrastructures of Care

In order to apply these insights to planning that improves liveability for fluidly housed youth, we must understand that careful planning does not aim to prescribe fixed solutions, but rather to create spatial affordances that can be maintained, activated, and adapted over time. It is therefore not sufficient to intervene in isolated sites, but necessary to plan interconnected infrastructures of care that extend across the city as a whole. These infrastructures of care do not only focus on spatial potentials, but interlink the everyday needs of fluidly housed youth, the processes of radical care with whom they meet these needs in urban space, and the socio-spatial affordances of urban space that foster gradients of privacy and in this way allow these processes to unfold.

In order to plan infrastructures of care for fluidly housed youth, we must understand their capacity to activate and adapt socio-spatial potentials through Moveable Elements from the bottom up in order to meet their needs for Health and Security, Community and Solidarity, and Agency and Autonomy. Understanding in which urban spaces different needs can be met best allows us to strategically locate Infrastructural Plug-In Networks, such as water, power, and sanitation, and Spatial Potentials offering varying degrees of privacy that can be activated and adapted by fluidly housed youth from the bottom up.

To foster a dense and accessible infrastructure of care, two complementary networks should be considered, as illustrated in Figure 9. These infrastructures should include a 15-minute network of (a) destinations connected by a denser network of (b) key connectors and transitional spaces.

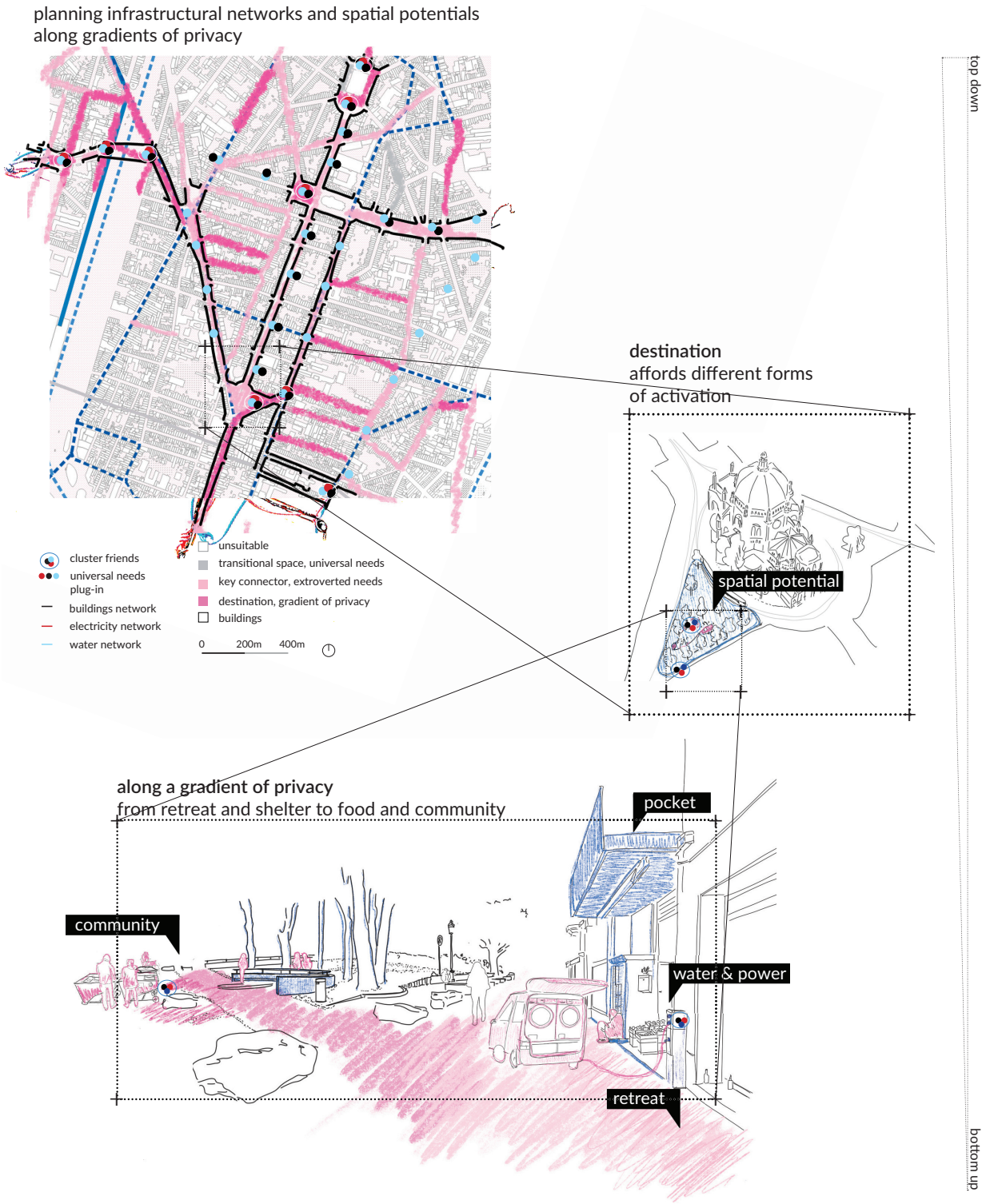


Figure 9. Two complementary infrastructures of care: (a) dense network for everyday needs; (b) complementary network for community and solidarity.

The first type of care infrastructure consists of Destinations that offer degrees of privacy and afford multiple uses within the cityscape. These spaces should be designed to meet introverted, ambivert, and extroverted needs and could include, for example, more private settings, such as sheltered setbacks in building facades that can be activated with hammocks, as well as sheltered areas on public squares that include public toilets and showers to meet needs related to Health and Security. At the same time, these networks should encourage activities that bring people together and foster Community and Solidarity through collective activities. While fleeting solidarity may arise when individuals briefly share a bench or meal, more sustained solidarity develops through repeated encounters and the collective maintenance of space, such as growing food, cooking, and occupying space together. Both types of solidarity depend on spatial configurations that allow people to gather in urban spaces and can include rearrangeable furniture and spatial potentials, such as empty corners in urban street networks or public squares providing power and water outlets. While empty corners could support collective food production and benefit from access to the existing water tabs, public squares with accessible power and water outlets could afford community kitchens, as well as food-sharing fridges, and benefit from access to existing cleaning facilities of surrounding buildings. These elements do not determine social relations, but how they are located creates affordances for meeting diverse needs, therefore providing the potential to activate and adapt them, fostering Agency and Autonomy.

The second infrastructure, consisting of Key Connectors and Transitional Spaces, does not need to meet all these needs in the same way. However, it can provide a valuable addition, for example, by outfitting existing street networks with fruit-bearing trees and bushes, which provide access to healthy and nutritious food, therefore affording to meet needs related to Health and Security. Additionally, installing water outlets on public building facades could maintain these green networks while providing access to drinking water and hygiene facilities, while planning sheltered setbacks could improve Autonomy and Agency by affording fluidly housed youth to plug in post boxes to receive mail, or lockers to store their belongings along the way.

These interconnected infrastructures do not require large-scale planning interventions. Often, small adjustments that enable lingering or interaction can strengthen the relational dimension of urban life. Additionally, top-down measures, such as those demonstrated by the City of Bologna (Comune di Bologna, 2014), can improve liveability, enhance access to resources, and foster community and solidarity through collective collaboration. Through “pacts of collaboration” and “micro funding,” Bologna provides residents with the opportunity to collectively care for public space and actively improve their quality of life in the city. This can include transforming green space into productive landscapes, such as edible plantings, snack paths, or community gardens, as well as repurposing underused buildings for collective activities, like tool sharing. Examples like these demonstrate how legal means that allow bottom-up activation can offer a way for fluidly housed youth to exercise their Autonomy and Agency while meeting the needs related to Community and Solidarity and Health and Security.

6. Conclusion: Planning Infrastructures of Care for Fluidly Housed Youth

This article reconceptualises homelessness faced by youth as a fluid condition through a socio-spatial lens. By foregrounding the lived experiences of fluidly housed youth, it demonstrated that fluid housing is not merely the absence of shelter but a fluctuating negotiation of socio-spatial needs across time and space. The concept of fluidly housed youth helps bridge the gap between institutional classifications and everyday realities, revealing how young people navigate instability while actively shaping their environments.

Empirically, the research demonstrates that careful planning and design require a deep understanding of the root causes of systemic oppression. By understanding the relations between space, behaviour, and needs, it identifies and demonstrates how we can plan urban spaces carefully that provide the potential to be activated and adapted through socio-spatial processes of care by fluidly housed youth to meet their shifting needs in the everyday. This way it provides guidelines to plan two connected infrastructures of care that have the potential to improve the liveability for fluidly housed youth.

Personas and time-geography helped uncover three socio-spatial needs of fluidly housed youth for: Health and Security, Community and Solidarity, and Agency and Autonomy. Ethnographic methods helped uncover the systemic relations between needs, active processes of care, and space, and distinguish socio-spatial patterns into three types of affordances: Infrastructural Plug-In Networks, Spatial Potentials, and Moveable Elements. Street network centrality analysis helped identify suitable locations for these spatial potentials to plan infrastructures of care for fluidly housed youth by categorising the street network into Destinations, Key Connectors and Transitional Spaces, and Unsuitable Spaces.

Planning alone cannot resolve the structural housing crisis. However, by combining multiple methods, it can expand the socio-spatial conditions under which the urban fabric can foster care, dignity, and agency for fluidly housed youth and this way "hack" systemic oppression through embedding care of everyday life in urban space.

7. Positionality of the Research Team

The development of the careful design approach and the writing of this article are shaped by the research team's positionality. While this work reflects collective engagement, the lead author, Wiebke Stadtlander, most directly shaped its direction, in dialogue with and critically supported by Birgit Hausleitner and Caroline Newton.

Wiebke Stadtlander is a white, cisgender, able-bodied woman from Germany. She was educated in Germany and the Netherlands, both of which are deeply marked by colonial legacies and entrenched structural racism. She benefits from structural privileges associated with whiteness, European citizenship, able-bodiedness, and academic affiliation. These privileges intersect with and inform her experiences as a woman from a working-class background. She has experienced how gender bias is normalised and how class-based exclusion operates subtly, particularly within knowledge production and academic environments. Her training in carpentry, architecture, and urbanism has made her attentive to how the built environment can reproduce intersectional inequities, often under the guise of neutrality. These experiences inform her commitment to challenging narratives of individual responsibility and to foregrounding embodied and situated knowledge in research and planning. At the same time, she remains aware that her interpretations are shaped by her own positionality and require ongoing reflexivity and engagement with perspectives beyond her own.

Caroline Newton is a white, cisgender woman with a double Belgian-British nationality, teaching and researching at a Dutch University. As an associate professor at TU Delft and diversity officer at the Faculty of Architecture and the Built Environment, her positionality is shaped by the interplay of privilege and awareness of systemic inequality. Having grown up in Belgium and built her career across multiple European countries,

including Belgium, the UK, and the Netherlands, she has benefited from access to high-quality public education and has held positions in prestigious European academic institutions. Her interdisciplinary training in architecture, urban design, and political science, combined with a PhD on urban planning in post-Apartheid Cape Town, has profoundly shaped her sensitivity to questions of race, power, and spatial justice. As a white European academic engaging with decolonial and intersectional debates, she recognises the privileges that her racial, national, and institutional position afford her, and is mindful that decolonial and justice-oriented agendas must be led and informed by those most directly affected by structural injustice. This awareness informs both her research on spatial justice and her pedagogical and institutional commitments.

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Conflict of Interests

The authors declare no conflict of interests.

Data Availability

Research data supporting the findings are available but not publicly shared due to ethical restrictions and the privacy of research participants. However, data are available upon reasonable and justifiable requests for research purposes.

LLMs Disclosure

We used the free version of Grammarly to check spelling and basic grammar. No generative AI tools were used to create or substantially edit the content.

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ARTICLE

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(Food) Justice in the Interim? Temporary Urban Gardening, Welfare Activation, and Plural Valuation

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Abstract

Across European cities, temporary urban gardening is used to address vacancy, sustainability, and social inclusion. Yet little is known about how justice is enacted when such initiatives are embedded in welfare and labor-market activation policies. This article examines a publicly funded urban gardening project in Dortmund, Germany, implemented as a labor-market activation measure on temporarily available land targeting employable welfare recipients. Drawing on qualitative data from interviews, participant observation, and document analysis, the study combines the concept of "food justice" with valuation studies to analyze how labor, land, and exchange are valued in everyday practice. Rather than using food justice as a normative benchmark, the article explores how notions of justice are produced and negotiated through institutional frameworks, daily routines, and actors' evaluative judgments. The findings reveal tensions between empowerment and dependency, care and control, and social recognition and material precarity. While participants experience gardening as meaningful work and a source of social participation and belonging, these valuations remain bounded by welfare regulations, temporary land tenure, and charity-based forms of food distribution. The article argues that temporary urban gardening projects function as spaces of plural and negotiated valuation, where justice is enacted provisionally through everyday practices, contributing to debates on temporary urban land use, food practices under welfare governance, and the limits of inclusion-oriented sustainability interventions.

Keywords

food justice; justice; social labor policy; temporary land use; urban agriculture; urban gardening; valuation studies; values; welfare activation; work opportunity

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1. Introduction

Across European cities, temporary uses of vacant urban land—from pop-up parks to urban gardening—have become emblematic tools of urban transformation. Promoted as creative, sustainable, and participatory responses to vacancy, such initiatives promise to do more with less under conditions of spatial scarcity (Altrock, 2024; Galdini, 2020). Increasingly, social and therapeutic agricultural projects mobilize food cultivation to promote empowerment and inclusion among vulnerable groups, while relying on scarce and often temporary land (Guirado et al., 2017). As spatio-temporally anchored places, urban gardens reanimate fallow spaces while reshaping everyday relations to land. In these spaces, questions of who participates, who benefits, and on what terms become tangible. Urban gardens thus foreground justice-related questions at the intersection of social policy, sustainability, and planning.

The case examined here is a publicly co-funded gardening initiative in Dortmund, Germany, located on a temporarily available plot originally reserved for road infrastructure. Created within a labor-market activation program, it offers welfare recipients a structured work opportunity through collective food production. It aligns with municipal goals of sustainability, social inclusion, and creative land reuse, forming a hybrid intervention at the crossroads of welfare policy, urban development, and food initiatives.

How these institutional aims translate into practice becomes visible in everyday routines. On weekday mornings, participants arrive at the fenced plot on the city's edge, change into work clothes, and tend raised beds—planting, watering, and harvesting vegetables later shared or donated. Gardening is not a hobby but part of a welfare measure: Work is scheduled and supervised, yet shaped by seasonal rhythms, bodily capacities, and deliberations over effort, care, and fairness.

Scholarship shows that initiatives like this operate within overlapping logics of governance and value, navigating between neoliberal rationalities and transformative aims, and between material interventions in space and the cultivation of social and ecological relations (Barry et al., 2025; Horst et al., 2017; Tornaghi, 2016). Read through this lens, the practices of gardening, work, and care described above unfold within a fluid terrain in which justice emerges in provisional and contested forms, shaped through ongoing compromises and adaptations.

Food justice remains an emergent and conceptually unsettled field in the German context, discussed by relatively few scholars (e.g., Hoinle & Klosterkamp, 2023) and referenced only sporadically in policy documents, sustainability reports, and local food strategies. Despite the growth of urban gardening in Germany, few studies connect these initiatives to food-justice debates, particularly where they intersect with labor-market or welfare policies. Production-oriented gardening initiatives that engage marginalized groups remain underexamined, and long-term unemployed people are largely absent from research on nature-based agri-food interventions (García-Llorente et al., 2018). This gap separates food-justice scholarship from the institutional realities of publicly funded projects.

The aim of this article is to examine how justice-related notions are enacted, negotiated, and constrained in a temporary urban gardening project embedded in labor-market activation policy, and how understandings of what counts as just and fair emerge through everyday valuation practices. Using food justice as a sensitizing framework, the analysis focuses on how labor, land, and exchange are valued. Rather than assessing the project

against a normative benchmark, the study investigates how justice is constructed in ongoing interactions. It examines how participants, instructors, and institutions enact justice in everyday practices within broader welfare and food-system arrangements.

Building on valuation studies, the article conceptualizes justice not as a fixed standard but as constituted through situated practices of valuation. From this perspective, worth is made to count through judgments, comparisons, and institutional framings, rather than assumed as a stable property (Heinich, 2020a, 2025). This approach aligns with recent planning scholarship that emphasizes the moral and spatial dimensions of valuation in urban settings (Bongers-Römer & Bakunowitsch, in press; Lake, 2024). Justice is thus understood as plural and contested (Stumpf et al., 2016), taking shape through different valuation frames—such as institutional, practical, and moral reasoning—that delineate what is considered fair or legitimate in temporary urban spaces.

2. Literature Review

2.1. Urban Gardening and Temporary Land Use

Urban gardens are widely discussed as contributors to sustainable urban development and resilience, combining green spaces with environmental, socio-cultural, and food-related functions (Barthel et al., 2015; Campbell et al., 2022; Ribeiro et al., 2023). Embedded in broader urban processes, they are shaped by neoliberal governance logics and shifting policy agendas, which generate inherent tensions rather than straightforward limitations. Scholars have highlighted contributions to green gentrification (Cucca et al., 2023) as well as tensions between participation, care, and unpaid or unevenly accessible forms of work, particularly where voluntary labor fosters care and inclusion yet remains unpaid and largely accessible only to those with sufficient temporal resources (McClintock, 2014; Rosol, 2012).

As a spatially effective practice, urban gardening is embedded in and actively shapes public spaces (Certomà et al., 2019; Milbourne, 2021). While planning scholarship widely acknowledges temporary urban uses (Chang, 2021; Madanipour, 2018), temporality in urban gardening research often remains implicit. Drake and Lawson (2014) explicitly engage temporality by tracing the historical discourses that shaped the common assumption of urban gardening as a temporary activity on land labeled "vacant" in US cities, framing it as an unusual, short-term land use serving specific purposes. The authors argue that this view normalizes community gardens as interim uses of vacant land, reinforcing their instrumental valuation within sustainability planning—a logic mirrored in planning frameworks that mobilize temporary uses as sustainability instruments (Chen & Yen, 2025).

Among the temporal dimensions at play, temporary land use arrangements in urban gardening are both enabling—providing access and opportunities—and structurally constraining due to impermanence and uncertainty, including the need to repeatedly establish soil, infrastructure, and practices (Demailly & Darly, 2017; McCann et al., 2023). Building on this, McCann et al. (2023) introduce the notion of *impermaculture* as an approach through which urban growers adapt to and work with the temporary nature of available land.

Furthermore, while temporality is rarely theorized in relation to justice concerns, Kotsila et al. (2020) show how *clashing temporalities* of care reveal justice implications, particularly between the slower, relational

timeframes of gardens and the faster, efficiency-oriented timelines of institutions and development. Feminist scholarship similarly engages these dynamics but shifts attention toward the gendered organization of care work, emphasizing its reliance on unpaid or underpaid labor linked to social reproduction and ethics of care (Braga Bizarria et al., 2022; Martin, 2019). This literature highlights how such practices are systematically devalued, contributing to a framing of community gardens as spaces of social reproduction rather than economically "serious" activity, and helping to explain their marginal position within policy regimes oriented toward productivity, efficiency, and growth.

Insights from this literature underscore that valuation and justice dynamics in urban gardening unfold within governance logics that privilege efficiency, measurability, and productivity; temporary use is therefore not a neutral planning mechanism but part of the wider interplay between governance, sustainability, and justice agendas. In this context, urban gardening embodies an inherently in-between condition (Classens, 2015; McClintock, 2014; Nikolaidou et al., 2016; Tornaghi, 2016).

2.2. Food Justice

Food justice emerged in North American scholarship and activism linking environmental and racial justice, alternative food movements, and food studies, and has since developed into a heterogeneous and contested analytical field (Alkon, 2018; Alkon & Agyeman, 2025; Dixon, 2014; Gottlieb & Joshi, 2013). Rooted in community-based struggles against racial and economic inequities, early food-justice debates focused primarily on consumption and unequal access to healthy food. More recent scholarship emphasizes how justice is defined, enacted, and contested within food systems more broadly, shifting attention from outcomes alone to the practices and relations through which inequalities are produced and addressed (de Bruin et al., 2024; Murray et al., 2023).

Scholars increasingly argue for an analytical approach that traces how different notions of justice materialize in specific contexts (Cadieux & Slocum, 2015; de Bruin et al., 2024). This perspective highlights the interpretive flexibility of food justice and its sensitivity to place, governance arrangements, and everyday practices. While much of the literature remains US-focused, recent research has turned to European contexts, identifying land access and tenure as key sites of inequality, particularly for marginalized groups (Coulson & Milbourne, 2021; Horst et al., 2021).

Food-justice scholarship distinguishes several interrelated dimensions of justice, most commonly distributive, procedural, and recognitional. These address the allocation of resources such as food, land, and labor; the fairness of participation and decision-making processes; and the recognition of marginalized groups as legitimate subjects of justice (de Bruin et al., 2024; Murray et al., 2023). Scholars also extend this framework to additional dimensions (e.g., epistemic, capability-based, restorative, intergenerational, ecological), underscoring its evolving and plural character. Urban gardening has become a key empirical site for exploring these debates.

Cadieux and Slocum (2015) conceptualize food justice as transformative change across four interconnected nodes: trauma/inequity, exchange, land, and labor. Building on this framework, this study uses food justice as a sensitizing analytical lens rather than a prescriptive model. Focusing on labor, land, and exchange, it examines how valuations, including inequalities, materialize in a temporary urban gardening project and how

justice is actively constructed, constrained, and contested in institutional and everyday contexts. This approach foregrounds participants' perspectives and highlights how power relations are worked through in practice, beyond simplified dichotomies of power and subordination (Hochedez, 2022).

2.3. Valuation Studies

Discussions of justice in the food system are inseparable from processes of valuation, i.e., how certain practices, actors, or relations come to be regarded as valuable or just. As de Bruin et al. (2024) observe, principles of justice express specific values shaped by the ways food is conceived, e.g., as a right, a common good, or a commodity. Extending the food-justice perspective, this study draws on valuation studies to trace how multiple and sometimes conflicting valuations of justice are enacted in practice.

Food-justice scholars have critically highlighted how audit cultures and neoliberal monitoring shape which forms of justice are rendered visible and accountable (Cadieux & Slocum, 2015). From a valuation perspective, tools of measurement, assessment, and justification are never neutral; they actively construct what counts as legitimate contribution or success (Boltanski & Thévenot, 2006; Heinich, 2020a). Justice principles thus function as evaluative devices through which abstract values are translated into judgments about concrete practices and claims (de Bruin et al., 2024). Valuation studies provide an analytical vocabulary for tracing how these judgments are made, stabilized, and contested.

Instead of treating value as a stable property, valuation studies conceptualize valuation as a situated, relational, and performative process through which actors ascribe worth and legitimacy (Heinich, 2020b, 2025; Lamont, 2012). This perspective is particularly suited to analyzing contexts where multiple evaluative logics coexist, such as welfare-based urban gardening projects that combine social policy, environmental goals, and temporary land use. Building on pragmatist traditions (Dewey, 1939), valuation is understood as an ongoing accomplishment—a process of meaning-making shaped by context and interaction. It is embedded in social relations, institutional frameworks, and material arrangements, revealing broader hierarchies of worth and moral order.

Here, the concept of valuation complements the food justice lens, redirecting attention from what is valued to how valuation unfolds in practice. This study draws specifically on Heinich's (2020a) framework, which distinguishes between valuation by measurement, valuation by attachment, and valuation by judgment. While all three modes are present, the empirical material primarily reveals judgment-based valuation, which the analysis foregrounds—moments when actors compare, justify, and assess what counts as fair, meaningful, or appropriate in relation to work, land, or exchange. Focusing on judgment allows the analysis to show how everyday moral judgments and institutional metrics operate as patterns of valuation that stabilize particular interpretations of justice, even under conditions of temporality and welfare governance.

3. Methodology

This study adopts a qualitative, exploratory case study design (Yin, 2018) grounded in a social constructivist perspective (Jones, 2002). Fieldwork was conducted between 2021 and 2022 during the project's establishment phase, allowing observation of how goals, values, and institutional logics were formed and negotiated in real time. Pandemic-related restrictions occasionally constrained participation and observation.

The dataset comprises 10 semi-structured interviews with participants, project staff, and representatives from the municipal administration and the public employment agency, 12 participant observations of everyday work, meetings, and events, and 15 supplementary documents, including funding applications, reports, and policy frameworks. Interviews were audio-recorded, transcribed, and anonymized; all interview excerpts quoted in this article were translated by the author. Interview references use an internal coding system (I + number).

Interview participants were recruited during participant observation once familiarity and trust had been established. Selection of project participants was shaped by relationships built during fieldwork and participants' willingness to engage within the mandatory program context, resulting in interviews that primarily reflect more outspoken or actively involved perspectives. Recruiting interviewees proved challenging in some cases due to hesitations about participating, and one scheduled interview did not take place due to participant dropout. The researcher's presence also shaped the field: Early note-taking was perceived as unsettling and was discontinued in favor of retrospective fieldnotes to reduce reactivity. Positionality was further addressed through memo-writing and comparison across interviews, observations, and documents.

Data analysis followed a two-stage qualitative coding process using MAXQDA and principles of qualitative content analysis (Kuckartz & Rädiker, 2023). In the first coding round, the material was structured through thematic categories informed by the food justice framework, particularly labor, land, and exchange, alongside codes capturing perceived strengths and weaknesses of the project from different actor perspectives and an "in-between" category for ambiguous or cross-cutting observations. In a second analytical step, these coded segments were revisited with a specific focus on valuation practices, including inequality-related issues.

Drawing on valuation studies, the analysis examined how actors evaluated, compared, and justified practices and arrangements within these themes. Empirical indicators of valuation included evaluative language (e.g., meaningful/pointless, fair/unfair), comparative judgments (e.g., effort, contribution, compensation), explicit justifications of institutional rules, embodied and non-verbal practices observed during everyday interactions, and assessments regarding work, land use, and exchange. Analytical memos were used to trace patterns across actor groups and to examine how judgments were embedded in institutional frameworks, everyday routines, and specific rationalities.

Methodologically, this approach is well-suited to analyzing how valuation practices are articulated and enacted within the project. Semi-structured interviews were designed to explore actors' assessments of strengths, weaknesses, and tensions within the project, while participant observation enabled analysis of valuation practices as they unfolded in everyday interactions. Document analysis provided additional insights into institutional frameworks, enabling triangulation between expressed judgments, observed practices, and formalized institutional valuations.

4. Case Study Introduction

In the Ruhr region, 37% of the land area is agricultural, making urban agriculture the most significant component of the region's green infrastructure (Häpke, 2020). In Dortmund, gardening has long been part of urban life: from historical workers' gardens for subsistence to allotment gardens for recreation and

ecological engagement (Steinborn, 2011). Though initiatives combining food cultivation and social policy are rare, exemplary cases do exist (Regionalverband Ruhr, 2020). Over the past decade, Dortmund has integrated urban gardening into development strategies, exploring its socio-ecological potential. This case unfolds against this local background.

Dortmund's municipal agenda slowly but increasingly recognizes food as a planning issue, as reflected in the 2021 climate change action program, which defined food and agriculture as independent fields of action. Related efforts, including the local food council and emerging research projects, further embed food in urban governance. These developments have gained momentum ahead of the International Garden Exhibition (IGA) 2027, a major regional development event positioning the municipality of Dortmund as a key local actor in the implementation of the event. In this context, the city increasingly mobilizes urban gardening as a tool for sustainability and territorial branding, embedding food-related initiatives within municipal policy and reflecting growing institutional attention to the socio-ecological dimensions of food.

The analyzed project is not a classic food justice initiative—food justice is neither an explicit aim nor linked to an agenda for systemic change. Yet elements of food justice are implicitly present. Although formally designed to promote employment and reduce welfare dependency, the project can reproduce existing dependencies and further social inequalities. Following Cadieux and Slocum's (2015) notion of food justice as a continuum, the case provides an exploratory setting in which these dimensions are negotiated through practice. The analysis centers on individual-level enactments rather than on broader societal valuations of food.

The project is referred to here by the pseudonym Urban Harvest. Urban food production is linked to a labor-market activation scheme (*Arbeitsgelegenheit*, AGH) regulated under §16d of the German Social Code Book II (SGB II). Table 1 summarizes the program's institutional framework at the time of data collection.

Table 1. Overview of AGH as a publicly funded work scheme.

Legal basis	§16d SGB II
Target group	Women, welfare recipients (many long-term unemployed)
Purpose	Employability & social (re)integration, transition into employment
Status	Welfare recipients in a publicly funded work scheme (no labor-law employment)
Work duration	Six-month contracts, extendable up to 36 months; ≤ 30 h/week
Compensation	ca. €2/hour additional expense allowance (not a wage; no effect on benefits)
Participation	May be mandatory under welfare rules, with (limited) preference matching
Sanctions	Non-compliance can lead to welfare sanctions, during study largely suspended/rare

The project brings together actors from the municipal administration, the local employment agency (*Jobcenter*), a non-profit organization serving as the implementing body, and the participants themselves (German-speaking local women), all of whom pursue distinct yet overlapping aims. Table 2 summarizes these groups' main goals and functions. Their differing evaluative orientations co-define what counts as success, fairness, and purpose within the project.

Daily interactions are shaped by both practical demands and normative questions about how social inclusion, ecological practice, and institutional requirements can be aligned. Instead of following a unified program, the project operates as a site where labor-market, social, and urban-sustainability agendas intersect, forming the evaluative backdrop against which food justice aspects such as work and food itself acquire meaning.

Table 2. Actor groups: Goals and functions.

Actor group	Main goals/rationales	Functions/roles
Participants	Assigned by Jobcenter; participation fulfills welfare obligations; occasional personal interest in gardening, social contact, or daily structure	Build and maintain garden; participate in daily work routines
Non-profit implementing organization (staff/instructors, management)	Support vulnerable groups; promote social inclusion, respect, and empowerment through work and learning	Implement the publicly funded measure; organize and manage the project; supervise participants; develop garden as productive and social space
City of Dortmund	Advance social inclusion and sustainable urban development (linked to SDGs 8, 11, and 12); position local food initiatives as part of the city's sustainability agenda	Provide land and funding for the build-up phase; accompany implementation and coordinate the project's integration into municipal programs and sustainability politics
Jobcenter	Reinforce employability and transitions to employment under §16d SGB II	Finance AGH; assign participants; support, monitor outcomes, and assess employability progress
Local food bank	Support local food redistribution and social assistance by collecting (unsold) food and distributing it to people in need	Receive donated organic produce for redistribution
Local community	Foster local cooperation and access to fresh, locally produced food; engage with the garden as a shared community space	Participate in educational activities, events, and citizen engagement; act as users, customers, or cooperation partners

5. Results

5.1. Justice Between Opportunities and Fairness

Among project managers, funders, and municipal representatives involved in Urban Harvest, justice is primarily understood as equality of opportunity. In this governance-oriented perspective, justice is less about redistribution than about enabling social participation through structured work. One instructor critically reflected on this framing, noting that moving towards social justice would require the participants to gain steering power within the project, which would need to be "more open and accessible so everyone can participate" (I9), implicitly acknowledging the project's selective design, in which access and decision-making remain institutionally bounded.

This opportunity-based understanding is closely tied to welfare activation logics. A Jobcenter representative described AGH measures as ideally enabling people to live "a self-determined life without transfer payments" (I23). Justice is thus linked to empowerment through work: providing structure, meaningful activity, and a

pathway toward independence from welfare support. Within this framing, the project is valued as contributing to justice insofar as it offers participants a chance to contribute, (re)gain self-worth, and autonomy.

While governance actors articulated understandings of social justice in response to explicit questions, participants' perspectives on justice emerged more implicitly, through everyday interactions and practical negotiations of fairness within the garden. Initially, fairness was conceived as equality, expressed in participants' expectations of equal tasks and break times on site, grounded in their own understandings of work. In daily activities, this understanding resulted in conflicts due to perceived inequality, when individual capacities, health conditions, or personal circumstances differed. Moreover, these perspectives surfaced in moral evaluations of others as "good" participants.

In contrast, instructors emphasized fairness as situational and relational, adapting tasks to individual needs while explaining their decisions transparently. Over time, fairness came to be understood less as equal treatment than as individual recognition and inclusion among the participants. As one woman put it, it meant ensuring that "no one is left out" (I14). Alongside these positive experiences, tensions between empowerment and precariousness, and between social value and material reward, became visible. These are elaborated in the following sections.

5.2. Labor: Work, Structure, and Meaning

As a women-only AGH measure, Urban Harvest targets participants facing multiple barriers to labor-market participation, including long-term unemployment, care responsibilities, and health constraints (I8, I21). The project offers flexible working hours and physically adapted tasks, conditions particularly important given its peripheral outdoor location requiring bodily presence and seasonal engagement. Figure 1 shows the main functional elements of the garden—container facilities (including an office, storage, sanitary facilities, and a kitchen), a greenhouse, and raised beds—while paths and open green space indicate the general spatial organization of the site.

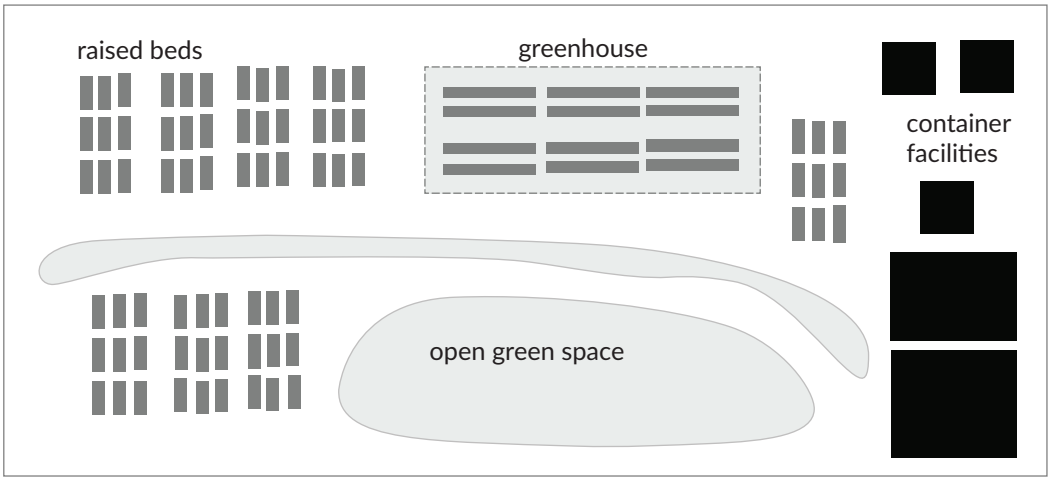


Figure 1. Schematic layout of the case study site.

While some participants hope the gardening experience may support future employment (I15), institutional actors emphasize that transitions into regular or subsidized work are rare and frame the measure primarily as providing structure and stabilization rather than labor-market integration (I8, I21, I23). Success is often assessed individually through attendance and continuity rather than formal employability outcomes. As the municipal representative notes approvingly, the project "seems to be succeeding" (I16), citing the low dropout rate as an indicator of participant engagement. These criteria foreground social stability and ongoing temporary participation within the framework of welfare activation.

Across all actor groups, this AGH is generally valued for providing daily structure for participants. Mornings in the garden are organized around shared coordination routines with the instructors, during which participants allocate tasks and begin activities such as watering, planting, or harvesting across different areas of the site (see Figure 1). This shared routine creates rhythm and orientation, replacing potential isolation with coordinated co-presence.

Beyond this structuring function, participants and instructors attach moral and emotional value to work. Labor is valued for producing visible, tangible, and useful outcomes (I14, I15). Participants and instructors repeatedly contrast the work with "pointless" AGH measures, emphasizing that "something real has to be done here" (I8). Meaning emerges through doing: building raised beds, tending plants, and harvesting self-grown vegetables. One participant summarized this succinctly: "Well, you do something, and then you end up with something in your hands that you can also eat, and it's delicious too" (I15). This meaning extends beyond the individual, as participants connect their work to others' well-being through donations of fresh, organic produce to the local food bank (I14). AGH-work gains legitimacy through tangible outputs and sensory experience rather than through productivity metrics.

Labor is also shaped by spatial negotiation. Tasks are distributed across the site according to physical capacity, weather conditions, and individual preferences, with instructors fostering participatory spaces through open discussions and shared decision-making. Participants may switch activities, slow down, or choose less strenuous work, practices that instructors actively accommodate. Fairness is enacted through these adjustments instead of uniform task allocation. As one participant explained, this flexibility contributes to the desire to "go to work," because it is "not just like that: You do this, that, and the other, like assembly line work" (I13). Working without pressure within one's abilities is explicitly valued, and contrasted with formal employment conditions (I13, I14, I21).

Over time, obligatory participation tends to turn into self-directed engagement. Participants refer to "our garden" or "our tomatoes," signaling identification with the site (I21, I23). Expressing her attachment, one participant explains: "When you have something to do and see that what you're doing contributes to success…you feel proud and go home with pride" (I15). Gardening habits—such as automatically reaching for a watering can when soil appears dry (I13)—illustrate how responsibility becomes internalized through repeated bodily interaction with the space. Here, labor-related valuations are based on social acknowledgement, trust, and the ability to act competently within a shared workspace.

The gardening competence is enabled by the instructors. Most participants enter Urban Harvest without prior gardening experience but acquire practical knowledge through learning-by-doing (I4, I9). Working outdoors is appreciated for its health implications, while gardening with seasonal rhythms fosters ecological

awareness (I13, I14, I15). Participants value this learning primarily through embodied competence and visible contribution, while instructors, project management, and public institutions understand it as a process of (re)building capability and responsibility through practice.

Labor valuations extend into food-centered activities, where moral expectations and everyday norms are negotiated. Shared meals, for example, become sites of moral nudging within everyday work (I9, I13). Instructors address plant-based nutrition as part of broader sustainability concerns. Framing this issue between moral agency and global responsibility, participants respond unevenly, sometimes resisting, appreciating, or pragmatically adapting (I8, I14).

Instances of food waste further expose contrasting moral rationalities. Instructors interpret discarded leftovers as a lack of appreciation for food (I9), while participants' practices also reflect everyday constraints such as time scarcity and care responsibilities. Instructors situate this tension within a broader critique of the food system, framing the garden as a place of counter-practice that revalues food and food labor through care and seasonality, in contrast to what is described as "supermarket socialization" (I9).

5.3. Land: Temporary Security on Marginal Site

The project reflects spatial logics of temporary and peripheral land use negotiated within planning constraints. It occupies a municipally owned plot at the edge of a commercial area, designated as a reserve for a future highway ramp. As construction is unlikely soon, the city granted a 10-year right of use, allowing cultivation within temporal limits. About 1.5 km from the nearest district center, the site is bus-accessible yet remains spatially peripheral. The site is neither central urban nor rural, but a peri-urban fringe space shaped by planning logics of reserve, where social uses become possible under conditions of no immediate economic pressure.

Concerns about vandalism and theft led to the installation of fencing and motion-sensitive lighting (I9). While these measures contribute to a protected and structured workspace appreciated by participants, they also mark the garden as socially bounded, intertwining safety with exclusion and shaping access. Due to the site's peripheral location, public recognition does not arise through everyday urban visibility but depends, for example, on project-level outreach, and municipal communication.

Securing the site required time and coordination across several municipal departments, revealing both institutional commitment and administrative fragmentation (I16, I21). The plot was selected primarily for its availability rather than suitability and remained subject to environmental regulations that added procedural constraints. Municipal actors frame support for urban gardening as contributing to public services (*Daseinsvorsorge*), a core mandate of local government, linking it to social cohesion and community life. They emphasize urban gardening's value by saying "We have learned from experience that it makes such a positive contribution to life in the city and to social cohesion" (I16), but stress that effects are hard to measure. According to the municipal representative, land scarcity and competing economic priorities are key structural obstacles to urban gardening in more urban areas (I16).

At the same time, the municipal representative frames such initiatives as inherently temporary—interim uses of "leftover" land awaiting redevelopment or transitional civic activities until participants secure private gardens (I16). Where central land is scarce and contested, urban gardening is considered appropriate only when it

does not impede economic priorities, legitimizing peripheral siting. This reflects hierarchies of urban land value: Gardening becomes possible precisely because the site currently holds low immediate exchange value. Justice claims are thus conditioned by spatial marginality. The garden's location mirrors participants' social marginalization, with justice enacted through the collective revaluation of "leftover" land.

Nevertheless, the 10-year lease with renewal option is considered favorable (I21), offering a degree of stability while keeping the land available for future development. Project managers appreciate this (limited) security but acknowledge its fragility: Long-term land access depends on political tolerance and municipal priorities (I21). The garden thus operates within an ambivalence of temporary certainty—institutionally stable enough to sustain several gardening seasons and cycles of activity, yet lacking long-term security beyond the project's administrative framework.

The garden's material design combines provisional structures, e.g., portable containers and raised beds, with lasting elements signaling permanence, e.g., paved paths and fruit trees, reflecting its institutionally supported yet spatially temporary status. Marginal land is thus rendered meaningful through collective care and everyday practice, even as long-term security remains uncertain.

Materially, the site reflects its post-industrial legacy. Ground cultivation was impossible due to compacted and contaminated soil, requiring vegetables to be grown in raised beds constructed on site (see Figure 2). Participants built these structures themselves, taking on much of the work in close cooperation with instructors—gradually transforming an initially unsuitable plot into a productive garden. However, early on, skepticism was widespread, as the management elaborates: Colleagues had ridiculed the project, and other professionals had called the location "terrible" or even "nonsense" (I21).



Figure 2. Raised beds used for vegetable cultivation at the project site due to unsuitable ground soil.

However, these constraints became central to the project's identity. What began as pragmatic adaptation was reframed as an experiment in alternative urban land use, reclaiming marginal land for social and ecological purposes (I8, I16). Over time, the initially "wrong" place was recast as proof that urban food production can succeed under difficult conditions. Project managers and municipal actors adopted this narrative, presenting the project as evidence that "it can work anywhere" (I21).

5.4. Exchange: Between Empowerment and Dependency

In its initial phase, exchange at Urban Harvest was shaped by the statutory AGH framework, which permitted production but prohibited sale. During this period, this exclusion from the market not only regulated exchange but redefined how produce is valued. Food was detached from price and productivity metrics and instead evaluated through non-market registers that emphasized who contributes, how effort was judged as fair, and whether the work was socially meaningful. In this way, the framework enabled the garden as a welfare measure while constraining economic valuation.

As part of the publicly funded build-up phase, produce had to be officially donated to the local food bank. In practice, however, informal sharing—such as participants taking vegetables home—introduces alternative valuations of fairness and deservingness (I8, I9, I14). These practices blur the distinction between giving and receiving: Although participants are themselves eligible for food aid, their labor repositions them as contributors. Value is thus attached not only to the produce itself but to the act of working and giving.

The harvest is further qualified through attributes such as freshness and organic quality, which support its valuation as both modest material relief and symbolic recognition (see Figure 3). Several participants explicitly noted that they could not afford organic produce otherwise, describing it as too expensive (I14). Taking vegetables home thus connects recognition of effort with access to food that would otherwise remain economically out of reach. Participants experience this practice as acknowledgment of effort and competence, not as entitlement (I13, I15). Fairness thus emerges situationally, produced through shared judgments of contribution and care instead of predefined rules.

The hourly additional expense allowance further exposes the moral dimension of exchange. For institutions, the ca. €2 hourly allowance is a compensation for additional expenses next to welfare, not a payment (I9, I21, I23); for participants, however, it often feels like partial remuneration for real work. One woman expressed: "We do the same work as the employed staff, but we get €2; they go home with a paycheck" (I15). Her comparison captures a felt sense of unfairness rather than a literal equivalence of tasks,

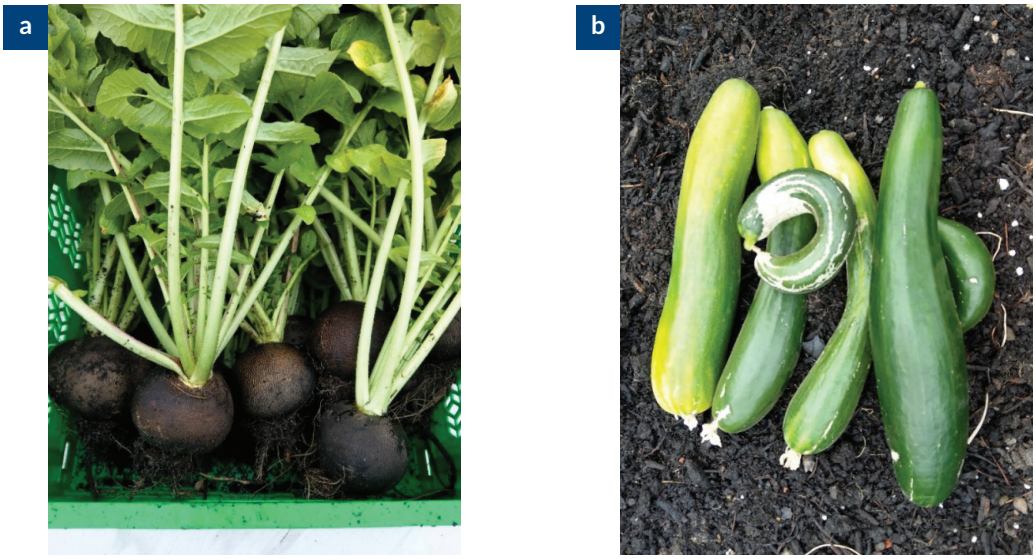


Figure 3. Example of freshly harvested produce: (a) black radish; (b) zucchini.

revealing how participants evaluate fairness through their own experience of effort and recognition, and less through institutional definitions. This discrepancy reveals conflicting valuations: one moral-bureaucratic, legitimizing minimal compensation through welfare logic; the other experiential, linking fairness to effort, dignity, and equivalence. Despite its modest amount, the allowance provides participants with partial recognition and a small degree of financial autonomy.

However, the project's capacity to address poverty remains limited. The allowance and access to vegetables cannot offset chronic income insecurity (I8, I9, I23). Interestingly, not all actors acknowledged the women's precarious situation: One instructor questioned whether participants could be considered as poor, distinguishing between statistical and "real" poverty, suggesting participants are disadvantaged but not destitute (I9). This selective awareness illustrates how, within the welfare framework, poverty is rendered part of the normalized status quo. Alongside this implicit acceptance, a quiet critique emerges of a system that recognizes social contribution while confining it to temporary, welfare-based arrangements rather than stable, fairly paid employment. As one instructor reflected: "The framework conditions here set clear limits…it would be nice if the women were in a different kind of employment than just this measure" (I8).

6. Discussion

Using valuation as a theoretical approach highlights how meaning is produced in practice, treating values as situational, negotiated, and contested, across intersecting project goals, actors, and expectations. Instead of assessing justice against fixed benchmarks, this discussion examines how the three food-justice dimensions—labor, land, and exchange—are shaped and limited through everyday valuation practices.

In the domain of labor, valuation emerges through shared effort and visible production. Once infrastructure and horticultural knowledge were in place, tangible outcomes—raised beds, harvests, and maintained plots—became key sources of recognition. Institutional metrics such as efficiency or employability offer only a partial framing of worth; instead, work is valued for its practical usefulness, shared purpose, and moral significance. Fairness is enacted relationally, negotiated between equal treatment and attention to individual capacities. Participants' attachment to the garden, expressed as pride and identification, reinforces ongoing engagement.

Land valuation follows distinct spatial and planning logics. The garden's worth lies in its ability to activate marginal, peri-urban land for temporary social and ecological benefit. This framing legitimizes the project as a form of public service while simultaneously reproducing precarity by confining urban gardening to peripheral sites with limited temporal security. Spatial conditions are thus not merely contextual but constitutive: Justice is conditioned by the garden's location on land with deferred exchange value, shaped by planning logics of future infrastructure and development priorities. The site's marginality mirrors participants' social positioning, as collective cultivation revalues "leftover" space through practices of care beyond its deferred exchange value. In this sense, the site can be understood as emblematic of the Ruhr region's landscape, where post-industrial land is mobilized for socio-ecological uses while urban food cultivation remains peripheral.

Exchange reveals explicit moral tensions. Situated on peripheral land and insulated from market exchange, the project's spatial and institutional configuration enables a temporary de-commodification of food: Rather than functioning as a commodity, food circulates primarily through charity-based giving and informal sharing. This allows food and labor to be valued through care, contribution, and recognition rather than price, yet

it simultaneously limits redistribution and economic autonomy by confining exchange to welfare-regulated channels. Donations to the local food bank anchor the project in a charitable economy, while informal sharing blurs the distinction between receiving and contributing.

Taking produce home is experienced by many participants as both modest material relief and symbolic recognition, affirming self-efficacy. In this way, participants move between positions of potential recipients of food assistance and contributors to the food provision of others within a welfare setting that enables socially valued contribution while reproducing dependency. The hourly allowance further illustrates this tension: Institutions define it as compensation for expenses, whereas participants experience it as partial remuneration for what is experienced as real work. Although symbolically meaningful, this recognition has limited impact on material security, reflecting the broader constraints of welfare-based arrangements.

Valuation thus unfolds between institutional activation logics and lived practices of inclusion and care. Instructors play a key mediating role. They translate bureaucratic requirements into supportive practice and balance a care ethos with the Jobcenter's logic of efficiency and control. At the institutional scale, the case study's configuration links food to welfare activation, assigning value to participation and care while leaving structural inequalities largely untouched.

In line with feminist scholarship on urban gardening, the case highlights how care-oriented, socially reproductive labor is valued for its relational contributions while remaining institutionally and materially undervalued; the project's design as a women-only AGH intersects with these dynamics, though this aspect is not examined in detail here. Participants' work gains moral recognition and social meaning, yet remains structurally marginal within welfare-based activation frameworks. Temporality further defines these dynamics. The time-limited right of use granted by the municipality allows the garden to operate and develop over multiple seasons, while fixed-term AGH contracts impose much shorter time horizons on participants, producing a structural mismatch between project continuity and individual precarity. Such interim uses constrain long-term planning, yet their adaptability and mobile infrastructure also enable experimentation and replication across sites, echoing McCann et al.'s (2023) notion of impermaculture and highlighting the fragility of interim governance arrangements.

Seen through recognitional, procedural, and distributive dimensions of justice (de Bruin et al., 2024; Murray et al., 2023), the project advances justice mainly through inclusive participation, with little emphasis on redistribution; only in rare cases does participation translate into regular employment. Recognition and procedural justice are present, but rather in partial and situational forms. Recognition emerges through respectful everyday interactions on site, where participants' work is treated with dignity and their contribution is valued; however, this recognition remains project-bound and does not extend to challenging broader stigmas.

Procedural justice unfolds mainly in daily work routines, where decisions about gardening tasks are explained transparently, while participants remain predominantly excluded from shaping the project's institutional framing and temporal conditions. Participation is assigned, not voluntary. Distributive justice remains minimal, as produce and allowances function as symbolic recognition without materially altering economic insecurity. Empowerment thus operates within, not beyond, structural constraints.

Looking at the results from a broader food politics perspective, urban gardening functions mainly as a labor-market activation instrument for welfare recipients rather than a (food) justice concern. As this article has shown, this framing produces incremental, food-related benefits for the participants, yet leaves redistributive transformation seemingly beyond reach. The project therefore sits between mitigation and reproduction of inequality, exemplifying how welfare-based urban gardening both opens and limits pathways toward food justice. As the city of Dortmund integrates food into sustainability agendas as a pragmatic tool of social policy, it signals cautious institutional engagement, currently achieved through goodwill and pilot initiatives rather than structural commitment.

7. Conclusion

This article examined how justice is enacted, negotiated, and constrained in a temporary urban gardening project embedded in labor-market activation policy. Across land, labor, and exchange, valuation practices function as a central mechanism through which justice is made, showing how food justice is configured within a welfare initiative not explicitly aimed at systemic change.

Institutional metrics rooted in welfare activation, such as employability and attendance, provide a partial foundation for valuation. Alongside these, moral-relational valuations grounded in effort, contribution, and care shape how participants and instructors assess fairness in everyday work. Expressions of attachment, such as pride and a sense of belonging, further stabilize these judgments, allowing the AGH to be assessed as meaningful. Together, these practices make justice tangible, albeit provisionally, within the boundaries of welfare regulation and urban development.

Temporary urban gardening thus emerges as a space where institutional, moral, and economic logics intersect, and where inclusion and precarity coexist within participation-oriented structures. Justice here is performed and sustained through everyday acts of valuation that redefine what counts as useful, fair, or worthy. This in-betweenness renders such projects analytically and politically significant, revealing how empowerment and dependency coexist within these arrangements.

As argued here, AGH measures such as Urban Harvest function less as pathways into employment and more as places of temporary stability and belonging within welfare activation regimes. Future research should examine post-urban-gardening-AGH trajectories, including long-term employment and social outcomes beyond the measure itself, which lie outside the scope of this study. Longitudinal research could further trace how valuation processes evolve as projects stabilize, institutionalize, or open to market logics. In the case examined here, the formal (subsidized) employment of former participants made produce sales legally feasible, marking a shift in the project's exchange possibilities and valuation regime. Comparative perspectives could illuminate how differently temporary gardens navigate the intersections of welfare activation, social innovation, and urban policy. Building on this, future work could draw on value pluralism to explore classifications of coexisting value orders, and how they compete, or stabilize, within such initiatives.

For scholars, this study underscores the importance of valuation as a lens for analyzing how justice is made in practice, complementing food-justice research that often assumes fixed ideals. For policymakers and planners, it highlights both the potential and the limits of temporary projects as laboratories of learning: spaces that reveal plural patterns of valuation and values, yet remain constrained in the absence of structural

transformation. Moving beyond temporary activation requires rethinking urban gardening as part of a broader urban food landscape—where labor-market policy, planning, and social policy converge to secure lasting and equitable access to food production and land.

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Conflict of Interests

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ARTICLE

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Leveraging a Street Festival for Lasting Transformation in a UNESCO World Heritage Neighbourhood

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Abstract

This qualitative study explores how a temporary cultural event has impacted the repositioning of a neighbourhood and led to urban revitalisation. The analysis is based on the Kaya Kaya street festival, a private bottom-up initiative in Otrobanda, part of the UNESCO World Heritage Site Historic Willemstad, Curaçao. By temporarily using vacant (historic) properties and underutilised public spaces to host cultural activities, Kaya Kaya has played a key role in positioning the neighbourhood as an attractive and artistic place. Drawing on interviews and theories on temporary use, the economic impact of cultural events, and bottom-up initiatives, the study analyses how the event has shaped experiences, perceptions, and actions that have led to long-lasting impacts on the neighbourhood. It demonstrates that although events have a temporary nature, they can generate multiple long-lasting social, economic, and physical values that create new opportunities for their surroundings. Short-term event impacts are easy to quantify, but longer-lasting urban effects before and after are often overlooked by property owners, developers, investors, and policymakers. This case study aims to contribute to wider research on urban strategies by offering insights into how events as temporary use can be strategically leveraged to revitalise historic neighbourhoods while addressing benefits, risks, and limitations.

Keywords

cultural events; temporary use; urban revitalisation; world heritage sites

1. Introduction

This article explores how a cultural street festival functions as a form of temporary use and how it can translate vacancy into multi-dimensional place value in a historic neighbourhood, while also addressing risks

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and trade-offs. Vacant properties in historic urban neighbourhoods are often the result of economic decline, deindustrialisation, or negligence, leading to greater risks of buildings and monuments becoming damaged and decayed (Ikeda, 2022). Over time, this poor condition of properties and public spaces can contribute to a negative perception of a place (Simons et al., 2025). To counteract this development, various studies acknowledge the potential value of temporary use as a low-cost, quick, flexible, and creative solution that acts as a catalytic tool for urban revitalisation (Bishop & Williams, 2012; Madanipour, 2018; Oswalt, 2004), especially in declining urban areas with limited financial resources and planning capacity (Andres et al., 2019; Bragaglia & Caruso, 2022; Dubeaux & Cunningham Sabot, 2018). Recent work on temporary use further suggests that its contribution to urban revitalisation is best understood as multi-dimensional place value because value in place-based interventions is rarely singular and is typically categorised into economic, social, environmental/physical, and cultural values (Jégou et al., 2016). This aligns with Carmona's (2019) conceptualisation of place value as the diverse forms of value generated by how places are shaped and experienced, and distributed across stakeholders. This framing is particularly relevant in historic neighbourhoods, where the feasibility of reuse, the condition of the built environment, and community impact are tightly interconnected.

While temporary use in real estate is often associated with short-term functions such as temporary housing, office, or art spaces in vacant properties (Karachalis, 2021), mainly framed through the relationship between property owners and temporary tenants, this article shifts attention to events as a distinct form of temporary use. Although events are time-limited, research shows they can generate long-term social, physical, and economic effects that support urban revitalisation in historic areas (Lehtovuori & Ruoppila, 2017; Richards & Palmer, 2010), by reshaping the physical urban space and contributing to a city's economy and community (Richards, 2017a; Smith, 2018). However, prior research frequently focuses on either the short-term event impacts such as attendance, spend, and visitor experience, or the long-term effects of mega-events, with less attention to how recurring, neighbourhood-scale, bottom-up, event-based, temporary use translates into integrated place value for revitalisation, with regard to physical change, economic dynamics, and community effects.

This gap is especially relevant for small-island and tourism-dependent contexts, where historic centres often combine heritage sensitivity with limited public resources, fragmented ownership, and strong external demand pressures. Yet, events as temporary use remain comparatively under-researched in Caribbean settings and within UNESCO World Heritage urban contexts. This article addresses that gap by examining a cultural street festival as a temporary use that potentially generates interlinked physical, economic, and social value, while also taking into account the risks. Prior work on unconventional cultural practices demonstrates that festivals can operate as place-making processes that shape experiences, representations, and intentions at neighbourhood scale (Rota & Salone, 2014). Simultaneously, research increasingly emphasises that the design and management of temporary events in public space matters, as these interventions can be regarded as a form of temporary urbanism that can have positive effects on their locations, contributing to social and economic gains (Behmanesh & Brown, 2025). From a real estate perspective, emerging work on temporary uses also suggests that social value can have economic implications over time, reinforcing the need to analyse temporary interventions as a combined social–economic–spatial bundle rather than isolated effects (Mazzarella et al., 2025).

Against this theoretical backdrop, this article explores the Kaya Kaya street festival in Otrobanda, a historic district within the UNESCO World Heritage Site of Willemstad (Curaçao). Dating to the 18th century, Otrobanda, with predominantly Dutch colonial architecture with Caribbean influences, contains 463 registered monuments, accounting for over half of all monuments in Curaçao (Curaçao Monuments, 2024). Socio-economic developments around the 1950s led to urban decline, characterised by abandoned properties, dilapidated monuments, and reduced activity (Ministry of Social Development, Labour and Welfare, 2011). When the Kaya Kaya festival began in 2018, Otrobanda was widely perceived as a stigmatised place to be avoided by visitors (Simons et al., 2025). As a private bottom-up initiative, Kaya Kaya gradually grew to become an established (bi-)annual event attracting approximately 10,000 to 15,000 visitors. Recent editions expanded with an Art Week and an Urban School programme in the days leading up to the main one-day paid event. The festival transforms the streets (streets meaning *kaya* in the local language of Papiamentu) into temporary stages for music, dance, art, culture, food, drinks, and social engagement.

Using qualitative analysis and semi-structured interviews, this article examines Kaya Kaya as a temporary use from an urban studies perspective, focusing on the following research questions: (a) How has the festival's activation of underused spaces for temporary events affected the physical environment in Otrobanda's historic neighbourhood? (b) How has the festival impacted the economic value of the neighbourhood? and (c) How has the festival, as a bottom-up initiative, affected the neighbourhood community? By analysing Kaya Kaya's development and neighbourhood effects, the article contributes to wider debates on the potential of temporary events as an urban strategy.

2. Literature Review

2.1. Vacancy and Temporary Use in World Heritage Cities

Structural vacancy in urban areas poses intertwined social, economic, and spatial risks. It is associated with lack of safety, weakened social cohesion, holdings costs without income, decrease in surrounding property values, and investment appetite (de Jong, 2012; Koppels et al., 2011; Remøy & van der Voordt, 2007). Vacant properties also accelerate deterioration, worsening place image and residential demand (Koppels et al., 2011). In World Heritage contexts, these dynamics can be exacerbated because conservation rules, fragmented ownership, and financing gaps hinder adaptive reuse, leaving monuments vulnerable to decay (Ikeda, 2022; Maha Shree et al., 2024). Heritage conservation literature emphasises continuous use as the most effective way to preserve historic buildings (Organization of World Heritage Cities et al., 2014). Temporary use, framed as a sustainable heritage-led strategy, can support this by enabling reversible alterations without compromising authenticity and increasing users' awareness of heritage (Ikeda, 2022).

Against this backdrop, temporary use is widely presented as a pragmatic approach, also in heritage environments, to create value for public and private parties (Bragaglia & Caruso, 2022; Karachalis, 2021; Madanipour, 2017). This value can be framed as multi-dimensional place value referring to the diverse benefits and risks generated and distributed across stakeholders such as residents, businesses, investors, visitors, and public bodies (Carmona, 2019). This multi-dimensional approach is commonly discussed across physical/environmental, economic, and social domains, with cultural value often operating as a contextual layer that highlights history and meaning in heritage settings (Jégou et al., 2016).

2.2. Temporary Urbanism and Events

In this article, temporary urbanism is used as the closest analogue to temporary use (Chang, 2021). It refers to time-limited processes that activate spaces perceived to need transformation (Andres & Kraftl, 2021), often by disrupting everyday life (Madanipour, 2017). These interventions range from "meanwhile uses" to pop-ups and festivals, as tools to activate vacant and underused spaces and to bring about urban change (Bishop & Williams, 2012; Oswalt et al., 2013). Moreover, temporary urbanism is flexible enough to adapt to its specific site and context by responding to the needs of people (Andres & Kraftl, 2021). The combination of these core characteristics of temporality, activation, and adaptability is therefore considered catalytic for urban regeneration (Colomb, 2012; Lehtovuori & Ruoppila, 2017; Oswalt et al., 2013).

Events are a distinct form of temporary use that occupy a specific space during a specific time, literally "taking place" in both spatial and temporal senses (Falassi, 1987; Richards, 2024). Aside from time-bound activations, festivals and public events have been described as place-making processes that shape neighbourhood meanings and practices through unconventional cultural productions (Rota & Salone, 2014). Recent work further highlights that event design and management criteria influence whether temporary interventions translate into positive spatial, social, and economic outcomes in public space (Behmanesh & Brown, 2025). More broadly, Richards (2017a) states that there is a synergy between cities and events, as cities act as venues to host events while events use their catalytic power to foster urban development, and thus impact the social and spatial values (Richards & Palmer, 2010). A festival is a type of event focused on community celebration, culture, tradition, or art, and while all festivals are events, not all events are festivals (Falassi, 1987). Despite their temporary nature, festivals must provide visitors with everyday facilities such as eating areas, restrooms, and gathering spaces, all in a safe and maintained environment (Haugbølle & Forman, 2014). This enables festivals to function as accelerated experiments for testing sustainable solutions that can generate useful insights applicable across the urban environment (Haugbølle & Forman, 2014). Gold and Gold (2020) describe a process where multiple festivals held in a certain place generate tangible and intangible effects on its economy, culture, and environment.

Festivals can convert temporary activations to long-lasting transformations when channelled into permanent infrastructure and regulations, leading to urban revitalisation (Smith, 2012). However, many such changes are preconditions for staging events (Smith, 2012), and long-term effects may be intended or unintended, positive or negative (Preuss, 2007).

2.3. Risks, Governance, and Limitations of Events as Temporary Use

Critics warn that event-led temporary uses risk being exploited when they merely serve as a longer-term profit-oriented strategy, displacing temporary uses until more conventional functions become feasible (Colomb, 2012; Ferreri, 2015). Public streets and spaces may be closed for commercialised events, with prices rising to tourist benchmarks and access limited through paid, enclosed event sites (Gold & Gold, 2020; Richards & Palmer, 2010; Smith, 2018). Moreover, temporality can discourage long-term spatial visions and investment quality, and abrupt endings may leave places less attractive or harm vulnerable groups (Kelbaugh, 2002). As events draw attention and investments, they can accelerate gentrification and displacement risks (McGillivray et al., 2022), and their success may trigger conventional development that erodes the qualities that made sites distinctive (Oswalt et al., 2013; Pogoreutz, 2006). Furthermore, sponsor dependency and

weak institutionalisation can create instability and limit public benefit (Schuster, 2021). To counteract these effects, governments can adopt "resident-first" measures such as limiting closed-off event days, guarantee free-access hours and/or areas, analyse carrying-capacity limits, protect housing and local businesses, and stimulate spreading of events beyond crowded areas (Dransfeld & Lehmann, 2008).

Events alone cannot revitalise places; their effects are strongest when leveraged together with policy, planning, governance, and investment (Smith, 2012). The public sector can direct temporary use for public benefit while minimising the negative effects by controlling functions and rents (Ebert & Kunzmann, 2012) and establishing policies and agreements with clear objectives and scope (Stevens, 2018). Planners can also collaborate with organisers to provide continuity and stability that temporary projects often lack (Landry, 2006). Yet, institutionalisation carries the risk of formalising the spontaneity and undermining the creativity that makes temporary uses valuable (Pogoreutz, 2006). The type and scale of events also determine their impact. While research mainly focuses on the impact of mega-events, growing evidence illustrates that small bottom-up festivals can reframe place narratives and catalyse urban transformation (Prentice & Andersen, 2003; Richards, 2017a).

2.4. Events and Marketing

From a marketing perspective, events can generate media attention and positive associations with their host cities, benefiting creative sectors, investors, and public actors seeking to promote a cultural image (Karachalis, 2021; Prentice & Andersen, 2003; Turku et al., 2023). Festivals can also transfer positive visitor experiences to the places where they occur and, in heritage settings, reshape sense of place by disrupting established interpretations and opening space to explore cultural identities and alternative futures (Perry et al., 2019).

However, when used as urban marketing strategies, events can put pressure on the experimental nature of temporary use and exacerbate commodification, resistance, displacement risks, or other conflicts, particularly where reputational gains override local community interests (Colomb, 2012; McGillivray et al., 2022).

2.5. Events as Temporary Use in Heritage Settings

Events in heritage settings can support sustainability goals by activating underused spaces, stimulating adaptive reuse, and engaging wider publics in heritage awareness and management (Jones, 2019, 2022; Tommarchi et al., 2018). As event settings shape visitor experience, festivals can also function as testing grounds for heritage activation strategies, including redistributing visitors beyond prominent sites (Di Vita, 2022; Jones, 2022). Meanwhile, repeated events can place physical stress on the historic fabric of a site through vehicle access, event logistics, and increased footfall, potentially negatively affecting the site's authenticity (Timothy & Nyaupane, 2009). These dynamics underline the need for governance that safeguards resident access and aligns event delivery with heritage-sensitive guidelines and conservation priorities, for example by involving heritage experts in event planning and setting clear rules such as reversible, non-fixed installations on monuments and the use of frameworks such as the Historic Urban Landscape approach and the Sustainable Development Goals (Jones, 2019; Tommarchi et al., 2018).

2.6. Events as Temporary Use Within the Caribbean Heritage Context

Research on events as temporary urbanism in Caribbean heritage contexts remains limited, despite the region's strong links between culture, tourism, and place marketing.

Festivals are frequently used to promote historic districts and stimulate creative-economy activities in the Caribbean, with music often positioned as a cultural asset (Hernández-Acosta, 2020). Examples such as Old San Juan's Fiestas de la Calle San Sebastián and Saint Lucia's Jazz & Arts Festival illustrate both benefits in visibility, visitor spending, tourism, and investment interest, and recurring tensions around resident disturbance, rising prices, and authenticity in heritage settings (Guerrero, 2013; Walker, 2019). However, as Caribbean cities are increasingly mobilising cultural intangible heritage such as festivals for economic growth, these festivals risk being solely used for marketing purposes, neglecting the social costs for residents (Scher, 2011). In this context, small-island scale, tourism dependency, and vulnerable heritage sites can constrain both risk mitigation and the assessment of benefits and their distribution.

2.7. Bottom-Up Events as Temporary Use

Various forms of temporary use emerge in conditions where formal planning is weak, slow, absent, or lacking financial means, neglected by government and the private sector (Andres & Zhang, 2020; Oswalt et al., 2013). Within these contexts, citizens turn to temporary urbanism to compensate for uncertainty and missing uses and facilities (Bryson et al., 2018).

As a form of temporary use, bottom-up festivals are typically organised through voluntary, local networks rather than stand-alone organisations, relying on collaboration among residents, cultural actors, local businesses, public bodies, and other stakeholders (Getz et al., 2007). Research emphasises that these relationships shape what festivals can deliver locally, including trust, coordination capacity, and the mobilisation of resources beyond the organising team (Richards, 2015). As such, community impact often emerges not only during the event, but also through the organisational work surrounding it that can strengthen local legitimacy and reinforce a shared sense of ownership over place (Koreman, 2023; Larson et al., 2015). Particularly in heritage settings, festivals are often undervalued despite their potential to support heritage exploration and foster residents' sense of belonging and pride (Perry et al., 2019).

Bottom-up festivals are frequently discussed as contributors to placemaking. They activate community assets and public spaces, strengthen belonging, and support community wellbeing through shared cultural experiences and collective "making" (Brownett & Evans, 2020; Platt & Ali-Knight, 2018; Silberberg et al., 2013). Research also suggests that local rootedness and legitimacy matter for long-term value-creation, meaning that locally led initiatives that draw on local resources and respond to local needs are more likely to generate benefits that last rather than remaining extractive or externally oriented (Koreman, 2023).

Simultaneously, the literature highlights tensions and constraints. Residents may experience burdens such as crowding, noise, waste, traffic and parking pressures, enclosure of streets and public space, rising costs, and gentrification dynamics (Gold & Gold, 2020; McGillivray et al., 2022; Moisescu et al., 2019). Risks also include representation gaps and uneven participation (Brownett & Evans, 2020; Ellery & Ellery, 2019; Platt & Ali-Knight, 2018), as well as barriers created by permit, regulatory, and liability requirements for smaller groups

with limited capacity (Madanipour, 2017). Moreover, organiser objectives, including profit motives, may not fully align with broader community agendas, and the dependency on initiators can create fragility over time (de Jong, 2012; Richards, 2017b).

3. Methods and Data Collection

This study conducted a qualitative secondary analysis of an existing interview dataset collected by the authors as part of a larger study. The present study builds on prior, peer-reviewed research by the same authors based on the same case study, but which was focused primarily on place narratives (Simons et al., 2025). In that earlier study, the interviews were transcribed and analysed in the qualitative data analysis software MAXQDA using open coding. During this process, a range of interview segments were coded that fell outside the narrative scope of that study but shed light on the physical, economic, and community implications of events as temporary use. The presence of these under-analysed segments provided a motivation for the present study. In line with case study methodology, the research questions are case-anchored (Yin, 2009).

For this secondary analysis, the transcripts were re-read and hand-coded to systematically extract and organise passages relevant to the current research questions. Coding was guided by the research questions and focused on a set of categories: temporary use and the activation of underused spaces; physical changes in the historic built environment, including monuments and the wider heritage setting; economic impacts linked to tourism, marketing, and real estate dynamics; the event as a bottom-up initiative associated with community impacts, participation, and local collaborations. These categories were refined iteratively through repeated comparison across the interview transcripts.

The dataset consists of 18 semi-structured interviews (6 in person and 12 online) that were conducted between July and October 2024. In addition, two follow-up interviews were conducted to elaborate on key points that emerged during the re-analysis. The duration of each interview ranged from 60 to 90 minutes, using an interview guide with open-ended questions (Spradley, 2016) that allowed interviewees to raise issues they considered important. Interviewees were selected among participants of workshops held during Kaya Kaya, followed by additional purposeful sampling, and snowball sampling (Patton, 1990). The interviewee pool consisted of the event organisers, residents, other local stakeholders, event visitors, property owners, government officials, and event volunteers, representing a broad range of stakeholders from diverse backgrounds, ages, and relationships with Kaya Kaya and Otrobanda. All interviews were collected under prior ethics approval with participant consent permitting anonymised secondary analysis, which has been reverified and de-identified.

4. Findings

4.1. Activating Underused and Vacant Spaces Through Events as Temporary Use in Otrobanda

According to the interviewees, vacancy in Otrobanda derived from multiple, overlapping causes such as long-term disinvestment and urban decline, undivided family estates, unclear or absentee ownership, limited renovation capital, speculative holding, and stalled public projects. These conditions left buildings, including

monuments, deteriorating, and street maintenance lagging. As one volunteer recalled, “There was a lot of vacancy…monuments went further downhill because no one was there to care for them.”

Findings show that Kaya Kaya activated these vacant or underused spaces for their events through a bottom-up process that relied on long-term community connections, simple formalisations, and a “leave it in a better state” approach. The event served to beautify the area, enhance safety, and attract people to the neighbourhood, effectively showcasing the district at its best. Figure 1 provides an indication of the buildings and spaces that were activated.



Figure 1. Overview of buildings and spaces activated across festival editions.

To achieve the activation of buildings and spaces through events, the organisers leveraged their dense local ties, through informal ways like going house by house or using WhatsApp to approach property owners directly and to formalise access to event-led temporary use with simple, time-limited agreements. As one of the organisers described: “Otrobanda is a tight-knit community, so it often worked through trust and relationships. We approached the owners personally, explained our vision, and emphasised how their building could be part of something positive for the neighbourhood.” Being part of the community also led to informal inventories of which properties or areas were vacant, needed cleaning, were under renovation, or were potential settings for art, murals, or programming. Figure 2 illustrates an example of a temporary arthouse. The organisers explained:

> Because we've been working in this neighbourhood for years, we already knew which buildings were abandoned, which houses were under renovation, and which corners or alleys could become vibrant spots. The festival has always been about reactivating what is already there, so the process was very intuitive and community-driven.

Access to these spaces was typically formalised through short, simple agreements specifying the timeframe, function (installation, bar, stage, or exhibition), and conditions of use—including rent-free occupation, liability coverage, and the requirement to return the property in the same or better condition through cleaning, minor repairs, and painting.

According to the organisers, approximately 10 to 12 buildings were temporarily used during each Kaya Kaya festival (sometimes twice), amounting to about 40 to 45 properties activated over the course of the festival's history, excluding public spaces. Notably, the activations were not limited to vacant properties—partially occupied and transitional properties were also included, suggesting that temporary use can extend beyond vacant spaces alone.



Figure 2. Vacant properties temporarily used as an arthouse.

Activating these spaces was not without challenges. The variety of property owners, from public to private, and numerous undivided family estates, sometimes made it difficult to trace ownership. According to one volunteer, "The most derelict monuments are almost always undivided estates of which the heirs can't be traced." In some cases, owners only came forward once Kaya Kaya started using the space. In other cases, permission for temporary use was refused due to sale intentions, liability concerns, or distrust. Some owners required payment, which Kaya Kaya tried to avoid wherever possible to prevent setting a precedent.

Yet, there were also property owners who wanted to see change in the area and made their properties available to Kaya Kaya. One property owner explained:

> Instead of putting another business that sells clothes, I'd rather change the environment and enable Kaya Kaya to do their workshops and other activities for the people who live here, and to change the whole image of Otrobanda. These activities are of great added value because they bring different people to the area. It's also a sacrifice, though, because maybe I could've rented out that building for money. But I'd rather do it this way so that my investments also go up if the area is fixed. This is a long-term way of looking at it.

Typically, these activation processes can be slow and incremental, but framing them around a time-bound event created a clear focal point that mobilised property owners, volunteers, residents, and sponsors to act quickly. Moreover, visitors state that the temporary nature of the event increases its appeal, as people have a limited time window to come and experience the neighbourhood during the festival, as can be seen in Figure 3a.



Figure 3. Examples of temporary activations and urban improvements: (a) street activation during Kaya Kaya; (b) the mural "Life Is a Beautiful Struggle" by artist Sander van Beusekom; and (c) greening alleys with AC water.

4.2. Kaya Kaya Festival as an Urban Tool to Improve the Historic Physical Environment

Every year, the festival takes place in a different area within the Otrobanda neighbourhood. In preparation, various low-cost and mainly reversible physical improvements are carried out, consisting of maintenance, clean-ups of public spaces, streets, and gardens, basic repairs, safety upgrades, and (mural) paintings. These preparations have yielded measurable results, as reported by Kaya Kaya (2023): 400 kg of waste removed, 125 windows, doors, and yard gates restored, 40 social housing units painted, 22 monuments restored for security purposes, potholes in 14 streets fixed, approximately 75 LED lights installed, and four recreational spots created. Interviewees repeatedly linked these interventions to immediate improvements in walkability and perceived safety, saying "it used to be unsafe…now people are walking in all the narrow alleys without being afraid."

Arts and culture also contributed to the area's appeal within the built environment. From seven murals in 2018 to almost 70 in 2025, spread across alleys, squares, viaducts, and streets, Otrobanda has been transformed into an open-air gallery encompassing murals and other art forms. The murals were not only

seen as beautification, but also as a means of sharing narratives and inviting exploration (Figure 3b). One visitor explained that Kaya Kaya had shifted from "a street party" to "an urban tool," as murals "beautify the buildings" and "leave a message"—such as "Life Is a Beautiful Struggle"—reflecting the realities of life in the social housing community.

Nowadays, visitors come to Otrobanda specifically to go mural hunting and take photos, indicating that the district now offers a reason to explore on foot. Even though murals are reversible, painting them on registered monuments has at times created tensions, highlighting heritage-management dilemmas in historic districts (Breel, 2019). Interviewees largely experienced heritage as a backdrop to the event rather than a focal point. Monuments were framed as constraints—due to decay, renovation costs, and regulation—until repaired, at which point "everyone finds them beautiful." While UNESCO is mentioned, interviewees suggest that people generally "don't really know what can or must be done with it," making heritage feel like a "nice to have" rather than a lived practice.

Several activations outlasted the event time window, including the Kaya Kaya Creative Hub (a three-year lease contract with the purpose to activate Otrobanda and attract new audiences), a pop-up atelier that became a permanent atelier in Frederikstraat (Figure 4), an amphitheatre created from an underutilised public space, an empty lot transformed into a playground in Quintastraat (Figure 5), and stairways that were repaired and painted. As one volunteer describes:

> Kaya Kaya is very good at the small things that lead to bigger differences, especially for the people living there who can really use them. After the festival, some of the remaining physical changes stay in place so that the neighbourhood residents can continue making use of them.



Figure 4. Example of a temporary art gallery that became permanent in Otrobanda.



Figure 5. From vacant lot to playground.

Sustainability and adaptability were also implemented through temporary urbanism using small budgets to add more green to streets, use condensation water from air conditioning to water plants and make alleys greener (Figure 3c), create community food gardens, and provide more shade against the hot climate. One of the volunteers mentioned that "in the long-term the intention is to develop a masterplan with much more green."

Historic, empty buildings were often used for the events as pop-up bars, music performances, or art galleries. These activations changed how people perceived the spaces, prompting entrepreneurs and residents to recognise new uses for the neighbourhood. Interviewees noted a visible reduction in vacancy, with various buildings having been bought, renovated, and rented after the festival. While the process has been incremental, in one of the streets where the first Kaya Kaya was held, only one building now remains available for temporary use. Still, according to Kaya Kaya, more than 20 empty properties on the main streets have yet to be activated: "If the monuments become activated, they become safe. We save monuments and we re-use the buildings instead of building something new."

Improvements to public spaces like streets, sidewalks, street corners, and urban gardens also contributed to a greater enjoyment of outdoor street life. One resident explained:

> It really changes things, the outdoor street life. You see each other much more. The street life is what gives us pleasure, enjoyment, and togetherness. I always say it is the street, sidewalk, and corner that is Otrobanda. Everything happens out on the street.

Aside from physical improvements outlasting the events, one resident remarked that—notably—buildings and streets continue to be maintained and remain free from vandalism even outside the festival period, reflecting a broader sense of community investment in the upkeep of the area.

4.3. The Event's Role in Impacting the Economic Value of the Neighbourhood

Kaya Kaya generated footfall and visibility that translated into economic impact. Business owners reported full restaurants and high apartment occupancy during the festival week, with continuing demand after the event from tours and visitors. One business owner mentioned: "The week before Kaya Kaya…my restaurant is full." This development in year-round activity supports small vendors, and repositions Otrobanda as a destination rather than a "no-go area" (multiple interviewees). The event thus functioned as a place marketing tool: interviewees noted "for rent/for sale" signs appearing and stated that "Kaya Kaya has helped put the neighbourhood on the map."

Interviewees further linked temporary activations to a surge in investments such as acquisitions, renovations, and new hospitality ventures. A property owner observed that the festival's routine of cleaning, minor repairs, and murals "boosts property values," while others pointed to increased confidence that made transactions inside the historic district more plausible. However, with real estate prices increasing, several interviewees described asking prices for monuments as "crazy," citing high renovation costs and owners "waiting for the highest bidder," suggesting speculative behaviour.

The Kaya Kaya event also made an impact on tourism. Murals, guided art walks, and "Instagrammable" sites sustain a steady stream of visitors during and between festival editions. The increased visibility and footfall benefit tour guides, restaurants, and creative enterprises. However, during the event days, they also impose short-term trade-offs like street closures that limit access to businesses: "Every event they do, they close down the streets and people cannot reach my business…it's bittersweet but it's a sacrifice" (business owner). The economic spillovers extend beyond the initial vacant properties. Interviewees described adjacent spaces attracting new tenants, pop-ups, and upgrades—"the rest of the street benefits"—indicating that the impact of the event activations extends beyond the immediate event areas or vacant properties. Notably, the renewed image has also helped attract new residents to the neighbourhood who "want to live in Otrobanda now," increasing the demand for housing. This influx also extends to businesses that now express pride in being located in Otrobanda, or that have relocated to the area to become part of the community.

Aside from economic benefits, visitors, volunteers, and business owners raised concerns about the commercialisation of the event, describing it as "too commercial" and how it became "a huge attraction." One visitor questioned the private interests, arguing that "a small group profits…they have a commercial interest" and one business owner described a perceived "split between the festival side and the policy side," given the organisers' property holdings in Otrobanda and their stake in making the area "nice and safe."

Interviewees also consistently flagged gentrification risks, including rising property values, Airbnb conversions, and housing affordability pressures for current lower-income residents. Several argued for policies that balance economic development with safeguarding mixed residency and local enterprise.

In short, Kaya Kaya's temporary uses generated clear economic value through increased footfall, visibility, and investment appetite, while surfacing questions about exclusion, speculation, commercialisation, and gentrification.

4.4. The Social Impact on the Neighbourhood

While Kaya Kaya is organised as a private entity, it was widely framed by interviewees as a "bottom-up" or "community-based" approach because of its collaboration with volunteers and local stakeholders, and with government mainly acting as a facilitator.

Kaya Kaya's social effects were formed as much through the process of preparation as through the event itself. Weeks of volunteer tidying, painting, minor repairs, greening, and programming preparation functioned as participatory placemaking that "brought everyone together," building pride and everyday stewardship—"we now coordinate to keep the sidewalks clean" (resident). This work built on an existing cohesive community in Otrobanda, with longstanding neighbourhood groups translating their energy into visible local ownership: Youth and residents took on roles in cleaning, vending, hosting activities, and guiding walks. As one participant put it, "People felt, we can do this ourselves…they're empowered and now take initiatives."

The approach is described as emerging out of necessity, "not waiting for the government and taking matters into our own hands." This community-based initiative relied on wider networks: residents, volunteers, artists, small firms, and sponsors; some companies provided in-kind or financial support and used the festival to engage locally—"we've always felt that if we're in this neighbourhood, we should give back." The government's role was largely limited to facilitating permits and safety checks. Several interviewees viewed the community initiatives as useful "positive peer pressure" that validated community action and inspired others. The event organisers thus operated as unconventional stakeholders, bridging property owners, government, businesses, and the community to harness the potential of temporary use.

Social outcomes included stronger "social control" and perceived safety, and combining locals and visitors to participate together in music, art, and walks: "a beautiful mix…very local, yet attractive for tourists." Although Kaya Kaya is privately organised, one government official suggested that its model could offer lessons for public policy in small-island contexts. The official described it as "an adaptation measure for small islands," explaining that, because celebration is part of local culture, the festival format can help mobilise people, produce visible results, and end with a shared celebration of what has been achieved.

Limitations and risks were also widely noted. As a private-led initiative, continuity depends on a small core of initiators: "If the driver steps back, who continues?" Moreover, some ask how to ensure long-term pulling power. The interviewees also called for more government engagement in collaboration, faster permit processing, incentives for reusing vacant buildings, and a long-term vision for the area.

Residents flagged disturbance concerns, including crowding, noise, privacy, and photography in front of homes. In this respect, the temporality of the event was seen as an advantage because "everyone goes home after."

Finally, the very success that attracts newcomers can fuel gentrification and change the neighbourhood dynamics, even as some new investors express intrinsic commitments to community benefit. As one property owner summarised, "Kaya Kaya catalyses, but entrepreneurs, residents, and policy must carry it forward" to consolidate social gains and safeguard inclusion.

5. Theoretical Discussion

Kaya Kaya illustrates how vacancy and underuse in a historic neighbourhood can be converted, quickly and at low cost, into temporary activations when formal planning capacity and investments are limited. Interviewees linked Otrobanda's vacancy to disinvestment, fragmented ownership, and limited renovation capital—conditions in which bottom-up temporary use becomes a pragmatic mechanism to mobilise stakeholders, volunteers, and short-term agreements (Bishop & Williams, 2012; Madanipour, 2017; Oswalt, 2004). Consistent with research on temporary urbanism and event-led revitalisation, the festival functioned as a catalytic form of temporary use that brings people into overlooked places (Colomb, 2012; Lehtovuori & Ruoppila, 2017; Richards & Palmer, 2010).

The article's main contribution demonstrates that Kaya Kaya generates physical, economic, and social value, while additionally illustrating how this multi-dimensional value is culturally and contextually realised in a Caribbean heritage setting. In Otrobanda, the most durable effects were tied to the street as the primary urban space. Pre-event collective preparations—including clean-ups, minor repairs, painting, greening, and safety measures—combined with the culminating shared festival moment, resonated with local cultures of outdoor sociability and the prevailing climate, rendering small improvements in walkability, perceived safety, cleanliness, and shade meaningful well beyond the event itself. This helps explain why time-limited activation translated into everyday benefits, even when many interventions were effectively prerequisites for staging the event (Preuss, 2007; Smith, 2012). Notably, interviewees also described a "positive peer pressure" mechanism, whereby repeated visible upgrades encouraged residents and owners to maintain properties, keep streets cleaner, and invest incrementally, thereby extending impacts beyond the temporary event and embedding upkeep in daily practice.

Meanwhile, heritage was largely experienced as a backdrop or constraint rather than an explicit programmatic focus. Debates around murals illustrate the governance tension between arts-led activation and conservation expectations. This aligns with calls to better integrate heritage expertise and establish clear, heritage-sensitive guidelines so that activation strengthens rather than compromises authenticity and management (Jones, 2022; Perry et al., 2019; Tommarchi et al., 2018).

Economically, Kaya Kaya's murals and art walks created reasons to visit both before and after the festival, supporting more sustained footfall and enhancing Otrobanda's repositioning within Curaçao's tourism economy, while also addressing familiar risks such as rising prices, private interests, and gentrification pressures (Gold & Gold, 2020; Richards, 2024; Richards & Palmer, 2010; Schuster, 2021). Social value was generated through both preparation and performance, with volunteering and collaboration fostering pride, stewardship, and informal social control. A notable nuance is that the one-day main event made disturbance feel limited. However, the reliance on organisers raised fragility concerns, which de Jong (2012) also identifies as a risk.

Overall, the case supports that events can catalyse revitalisation but cannot deliver it alone. Consolidating longer-term benefits and managing risks requires complementary policy, planning, and governance (Ebert & Kunzmann, 2012; Smith, 2012; Stevens, 2018). As a single-case study, findings are context-specific and the transferability may be limited. However, they address a recognised gap in research on events as temporary use in Caribbean urban heritage settings, which may offer analytical insight and practical considerations for comparable small-island historic districts.

6. Conclusion

The case demonstrates how events as temporary use can activate vacant and underused spaces in a World Heritage neighbourhood and contribute to revitalisation with physical, economic, and social effects. Conditions of uncertainty and neglect created opportunities for a bottom-up initiative (Andres & Zhang, 2020; Oswalt et al., 2013). With simple, low-cost, and reversible interventions, Kaya Kaya managed to showcase the potential of the neighbourhood, shifting the place narrative in ways that attracted collaborators, visitors, residents, and investments. Remarkably, the spaces activated through temporary programming went beyond the vacant sites, producing positive spillovers for adjacent occupied properties.

The use of the festival as a vehicle for place image and marketing led to increased footfall from locals and tourists, more investments, temporary to long-term conversions, and sustained maintenance. Moreover, it generated social value expressed through pride, community engagement, collaboration, sense of place, and ownership, consistent with prior work on the role of participation in festivals and place-making (Brownett & Evans, 2020; Koreman, 2023; Perry et al., 2019). Due to the close ties to the Otrobanda community and strong local knowledge, the initiators were able to deliver context-specific, incremental gains, showing that urban planners can learn from this approach and partner with unconventional stakeholders to help improve neighbourhoods through a bottom-up approach. In the heritage context, the findings suggest moving beyond heritage as a passive backdrop by more intentionally integrating interpretation and participation into festival programming, supported by heritage-sensitive guidelines and expertise. This could strengthen public understanding of UNESCO World Heritage while using temporary activation to support adaptive reuse (Jones, 2019; Perry et al., 2019; Tommarchi et al., 2018).

As an urban revitalisation strategy, events as temporary use can leverage time productively by preventing decay through low-cost and reversible adaptations to heritage sites, experimenting with new functions, improving visibility and economic feasibility for property owners and investors, and generating social returns in the form of pride, community participation, and safety. However, sustaining benefits requires governance and policy measures to limit risks such as gentrification, increasing prices, commercialisation, and dependency on initiators (de Jong, 2012; Ebert & Kunzmann, 2012; Smith, 2012; Stevens, 2018).

Conflict of Interests

The authors declare no conflict of interests.

Data Availability

The data that support the findings of this study are not publicly available because they contain information that could compromise participant privacy.

LLMs Disclosure

This manuscript was prepared with the assistance of ChatGPT to support grammar, spelling, and clarity. All content was reviewed by the authors, who take full responsibility for the final text.

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Taking Up Some Space: How Urban Space Use Supports Material Circularity in Outdoor Public Spaces

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Abstract

Circular urban design is vital for developing the urban environment amidst intense urbanization, resource depletion, and climate change. Recent studies indicate that using urban space effectively is a necessity to promote circularity in the built environment. Yet, so far, discussions on the use of space within the circular economy have hardly shown its value beyond financial terms and enabling the circularity of buildings. To better capture the non-financial benefits and costs, this study uses a plural value perspective by means of a public sector circular business model lens. The model is applied to three cases of urban space use in the city of Amsterdam. In these cases, space is used for temporary storage and handling to facilitate material reuse in urban area maintenance and (re)development projects in outdoor public spaces. Our findings demonstrate that (temporary) use of urban space is a crucial resource to store materials and enable material circularity in outdoor public spaces. The findings show that more permanent use of urban space provides opportunities for value chain collaboration and professionalization of storage and handling, whereas shorter use of urban space can be utilized for temporary storage to orchestrate the reuse of materials locally. The (temporary) use of urban spaces enables reuse, repurpose, refurbish, repair, and/or remanufacture of materials and products applied in outdoor public spaces and can create public, social, environmental, and economic value. The findings guide project stakeholders, urban planners, and policy makers on how to unlock the value-creating potential of (temporary) urban space use to create circular outdoor public spaces.

Keywords

circular economy; public space; reuse; urban planning; urban space; value; value creation

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1. Introduction

The circular economy (CE) is considered an alternative to the linear economy. In contrast to the make–take–waste linear economy, CE focuses on narrowing, slowing, closing, and regenerating material loops (Konietzko et al., 2020). Most authors consider CE as a means to sustainable development also at the city scale (Kirchherr et al., 2017). Many European cities are aiming to become so-called "circular cities" (Circle Economy Foundation et al., 2024). A "circular city" requires a transition in adopting CE principles at the city level (Prendeville et al., 2018). Given these developments, awareness and understanding of the city-level transition to a CE has gained increased importance. City-level transitions overarch different industries, sectors, and contexts, with foci ranging from consumer goods to the built environment (Circle Economy Foundation et al., 2024). Cities have different city strategies and policy approaches to facilitate the CE (Bolger & Doyon, 2019; Prendeville et al., 2018).

In circular cities, circular development entails urban development that supports activities and infrastructure that facilitate circular flows, regeneration, and resilience (J. Williams, 2021). Within circular development, the importance of spatial dimensions is recognized (J. Williams, 2023). Additionally, concepts such as urban ecology (McDonnell et al., 2009) and urban metabolism (Amenta, 2026) respond to and explore the material–spatial relationship in the CE. In spatial planning, a more in-depth exploration centers on what role planning can play to create space and infrastructure for circularity (J. Williams, 2020). For instance, in land-use policy, particular attention is given to derelict, vacant, and underused urban land (Amenta, 2026).

Yet, another dimension needs to be considered in cities' circular development: temporary use of urban space. The spatial implications of circular strategies to cities are only rarely addressed (Baumgartner et al., 2024). As space is scarce in cities, temporary occupation (or use) of vacant spaces is a strategy to optimize urban space use for circularity. The temporary use of buildings is a contributing factor to the CE, for example by using these as temporary makerspaces (Kawa et al., 2024). The temporary use of land is also recognized to facilitate circular development. For example, temporary land use to store reused building materials to create real estate with reused materials (Tsui et al., 2024). Though previous studies have looked into the role of (temporary) space use in the context of buildings, this role remains unexplored in the context of *outdoor* public space (OPS). OPSs are spaces that are outdoors and publicly accessible, such as playgrounds, squares, parks, streets, and roads. Materials applied in these spaces are also part of the circular development.

To develop land or urban space use strategies that accommodate circular development, cities need to understand the related value opportunities. Urban space is after all—especially in densely populated cities—in competition with other uses. Meanwhile, land designated to circular activities, even temporary ones, can accomplish social and environmental ambitions and create social and cultural value (Baumgartner et al., 2024). Therefore, this study addresses the following research question: How could different (temporary) urban space uses promote circularity in the outdoor public space and create value?

To answer this question, we analyzed three cases in the city of Amsterdam with a different spatial–temporal interplay of urban space use. The city of Amsterdam is committed to reusing materials in OPSs. It has introduced a principle for the OPS called "reuse, unless" to motivate reuse of materials within replacement and (re)development projects in the OPS (Municipality of Amsterdam, 2023). Data collection took place over the course of the years 2024–2026. For data collection, we conducted workshops, held multiple

semi-structured interviews, used internal documentation, and conducted several site visits. The main contribution of this article is an exploration of the value-creating opportunities of different (temporary) uses of urban space for the purpose of reusing materials in OPSs. The article is structured as follows: Section 2 describes the state-of-the-art of value opportunities in space use and material circularity, Section 3 outlines the research methodology, Section 4 presents the case study findings, followed by the discussion in Section 5 and the conclusion and implications for further research in Section 6.

2. State-of-the-Art

In the following sections, we discuss the state-of-the-art on the multi-value perspective on using urban space for circular development. Note that we use "materials" as a category containing both products and objects in the OPS.

2.1. The Value of Space Use in Circular Cities

To facilitate the circulation of different materials in the built environment, spaces are needed to store (and process) and redistribute these materials (Tsui et al., 2024). However, in cities, space is a scarce resource and competes with other uses (Obersteg et al., 2019). For example, in cities, high land prices may be a favorable factor for commercial real estate development (Yalçın & Foxon, 2021), the goals of mixed-use or multi-purpose development (Ferm & Jones, 2016), or urban redevelopment to attract high-value tourism and improve accessibility (Hess & Stevenson-Blythe, 2025). In the context of land allocation for circular activities in cities, Baumgartner et al. (2024) advocate that the academic debate needs to go beyond extracting solely economic benefits from land use. In fact, reutilization of vacant and underutilized land can be a force for driving sustainable urban transformation (Amenta et al., 2022).

2.2. The Value of Material Circularity in OPSs

In circular cities, buildings are considered material stocks, being part of the so-called "urban mine." Hence, buildings can supply our future secondary resources (Amenta, 2026). Within the OPS, this translates, for example, into the reuse of obsolete materials in OPSs (Horton, 2012). With an existing building stock in place, circularity emphasizes prolonging the use of materials during replacement or redevelopment. This involves the circular strategies of reuse, refurbishment, repair, and remanufacturing (Potting et al., 2017). These circular strategies are also referred to as "slowing the material loop" (Konietzko et al., 2020).

The CE is expected to contribute to achieving economic prosperity, social equity, and environmental quality (Kirchherr et al., 2017). Achieving the CE as part of policy goals is considered a public value (Van den Berghe et al., 2020). The European Union has the target to become a full circular economy by 2050 (European Commission, 2020). *Public value* is a disputed concept within academic literature. To interpret public value creation, the interpretation of Faulkner and Kaufman (2018) is helpful; they deconstructed public value into four key dimensions: creating trust and legitimacy, achieving societal outcomes, delivering service quality, and increasing resource efficiency.

2.3. Conceptualization of Spatial–Temporal Interplay

Based on the above-mentioned literature about the built environment, urban space, circular cities, and expected value in a CE, we come to a theoretical conceptualization of the spatial–temporal interplay concerning circularity in OPSs. Since material reuse in buildings requires intermediate storage space (Tsui et al., 2024), a similar rationale is logical for OPSs. Furthermore, we expect environmental, economic, social, and public value creation in the context of circularity in OPSs. This theoretical understanding is displayed in Figure 1.

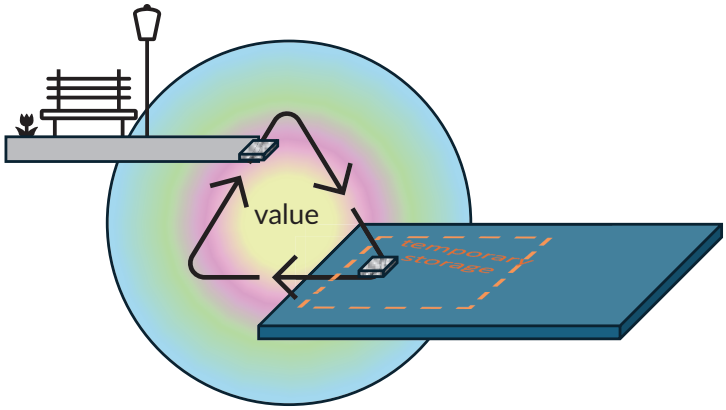


Figure 1. Visualization of spatial–temporal interplay: *Urban space use* contributes to *multiple value creation* through facilitating the *reuse of materials* in the OPS. The circle represents the city boundaries, and the four colors denote the generation of value across four distinct domains: social, environmental, economic, and public value. Example: concrete tile used for pavement.

3. Methodology

3.1. Case Study Approach

We used a case study approach to gain insight into how (semi-)temporal space use can accelerate the circulation of materials in the urban space. A case study approach is well-suited when little perspective and empirical support on the phenomenon is available (Eisenhardt, 1989). Specifically, when no prior theory is available, case study research is a useful approach to gain insight and offer new perspectives (Eisenhardt, 1989). We analyzed three cases within the Municipality of Amsterdam, using a public sector circular business model (PSCBM) framework (see Section 3.2). We followed the sequence of steps displayed in Figure 2.

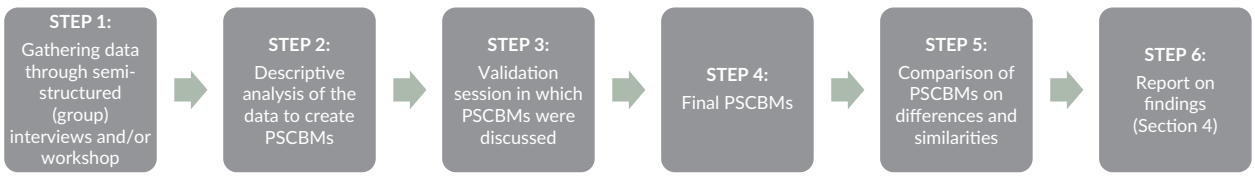


Figure 2. Research design.

3.2. Framework Used to Analyze Value

The PSCBM framework used in this study captures value generation from circular strategies from a public sector perspective, including a focus on sustainable value and public value creation. The framework is the result of a study conducted by two authors of this article in 2023, resulting in an internal report for the municipality. This report was commissioned by the Municipality of Amsterdam to design a business model for the reuse of materials within the city. In the Netherlands, OPSs are owned and managed by municipalities; hence, the interest in reusing materials within OPSs. For the previous study, we conducted a sequence of workshops inspired by Jonker and Faber's (2020) business model template (BMT). The workshops were conducted with practitioners from the Municipality of Amsterdam and resulted in a final public sector business model framework to be used by the municipality to explore the value of circular strategies in the OPS. We used this PSCBM framework for this study as well, containing the building blocks and questions displayed in Table 1.

Table 1. PSCBM building blocks.

Context	Building block	Content	Questions
Define value	Circular strategy (& Project description)	Description of the circular strategy (and the project)	What are the circular strategy/strategies you applied? Optional: What is the project context?
	Motive & Context	Description of the reasons, challenges, and requirements for executing the circular strategy	What are the reasons to implement the circular strategy? What are the challenges? What are the relevant requirements?
	The dream	Description of the common dream that is worked towards when implementing this circular strategy	What are the opportunities to apply the circular strategy/strategies? What is the dream regarding the circular strategy/strategies (i.e., one day…)?
	Value proposition (for each stakeholder, separately)	Description of the value proposition for each stakeholder	Who are the stakeholders and what are their tasks, pains, and gains, and how does the circular strategy contribute?
Deliver value	Core activities, parties involved, and resources required	Description of all activities, actors, and resources (incl. artifacts) required	What activities are required within the project and the municipal organization?
	Risks and risk mitigation	Description of risks and possible measures to mitigate them (and who is responsible for mitigating these)	What risks (and for whom) are present, and how are these mitigated?
	(Internal) test	Description of conditions for success and factors that influence feasibility	What are the conditions for success and factors influencing the feasibility of implementing the circular strategy/strategies?

Table 1. (Cont.) PSCBM building blocks.

Context	Building block	Content	Questions
Generated value	Value created	Description of benefits and costs that relate to the value domains: public, social, environmental/circular, and financial	What are the public, social, financial, and environmental/circular value created (i.e., in each value domain, costs and benefits are discussed)?
	Impact measured	Description of indicators that measure the impact	What public, environmental, financial, societal, and material/circularity impact needs to be measured to indicate the impact (i.e., track progress) and who is responsible for doing so?

3.3. Case Selection

Purposive sampling was used as a strategy to select cases and interviewees. Purposive sampling is a sampling strategy to retrieve a sample of a particular process or phenomenon (Robinson, 2014). The aim was to select cases with different temporal uses of urban space that enable circularity in OPSs. We focused our search for cases on the city of Amsterdam, since the Municipality of Amsterdam set a goal to become a CE by 2050. This includes the built environment, where they focus on reusing materials in the OPS (Municipality of Amsterdam, 2023, p. 54). The Municipality of Amsterdam is concerned with scheduling and managing replacement/redevelopment projects in OPSs. Due to their "reuse, unless" policy, they focus on reusing materials when executing these tasks. We selected three cases with different spatial–temporal use of space to understand their value creation potential, ranging from short-term to long-term use.

3.4. Case Descriptions

The three selected cases are all oriented around the storage function for urban space use (see Figure 3 and Table 2). The first case is the City-Scale Storage (CSS) and focuses on material storage within the city—including materials and products to be reused, refurbished, repaired, or remanufactured—enabled by long-term use of space to store materials. The storage involved two plots: one for mainly playground equipment (Amsterdam-Southeast) and one for mainly pavers and some street furniture and lampposts (Amsterdam Sloterdijk) near the City's Daily Maintenance department. Storage managers within this department are responsible for managing the storage space. This urban space use is regarded as semi-permanent, because in 2024 the storage managers lost part of the storage space to alternative uses. Meanwhile, storage managers are seeking opportunities to expand their storage capacity to unused municipal-owned space that has been reserved for the asset management of bankrupt companies. Since 2015, materials have been reused, but due to budget issues, these operations have been scaled down. Since 2022, a budget has been made available for managing the reuse of materials.

The second case, Neighborhood-Scale Storage (NSS), is urban space use in the transformation area Buiksloterham (Amsterdam North). In June 2024, a temporary materials storage capacity was created on a

plot of land that was prepared for real estate development. However, due to a delay in the real estate development, the plot is being used for storage until construction begins in 2 to 4 years. Predominantly pavers and concrete tiles are stored in this location. A contractor made the plot operational for storage capacity by creating a sand bed of ± 90 cm, followed by a layer of gravel of ± 30–40 cm. Also, three rows of concrete slabs were installed to create a road to provide sufficient space for transport vehicles. Finally, the site is surrounded by construction fences with a gate equipped with a lock code. In 2024, a project leader part of the area development in Buiksloterham (Amsterdam-North) managed the storage space. Materials for



Figure 3. The three cases of urban space use: (a) PSS: concrete tiles 850 m from project site; (b) PSS: concrete tiles near flat building; (c) NSS: concrete tiles and curbs, and baked pavers (front view); (d) NSS: concrete tiles and curbs, and baked pavers (back view); (e) CSS: concrete tiles; (f) CSS: bicycle racks; (g) CSS: bollards; (h) CSS: lampposts.

Table 2. Overview of cases.

Case	Scale	Duration of use	Budget source	Use of	Governed by	Place	Timespan of occupation	Area
CSS	City (material collection for projects in the city; repairs and replacements during use)	Long-term Temporary use of space for material storage	Municipal budget	Site near Daily Maintenance department + external site	Daily Maintenance department	Amsterdam Sloterdijk, near highway	No destined timespan	± 12,000 m^2
NSS	Neighborhood (transformation area)	Medium-term Temporary use of vacant space for material storage because of a postponed real-estate development	Land Development budget	Postponed real-estate development	Project leader	Buiksloterham, Amsterdam-North	Destined for ± 2–4 years	2,222 m^2
PSS	Project (maintenance project of an urban area)	Short-term Temporary use of a parking space for material storage	Project budget	Part of a public parking place	Contractor	Amsterdam-North	Destined for ± 8 weeks	± 200 m^2 (parking space 850 m away from the project) ± 50 m^2 (space on project)

reuse are sourced from urban area maintenance or (re)development projects within the city and are destined to be applied in OPSs within the Buiksloterham transformation area. A project leader from Buiksloterham is in charge of the storage, spending time on a regular basis sourcing material and managing material transport and storage.

The third case, Project-Scale Storage (PSS), is urban space use within and near a project site. It concerned a maintenance project of sidewalks in front of two flats (total: 1,338 m^2) in an urban area in Amsterdam-North in which concrete tiles were reused. For this purpose, proximity storage was required, only for the duration of execution. A small municipal parking place was made available for storage capacity, 850 m away from the project. During execution, a small part of green space was occupied near one of the flats. The occupation of the space was short, and non-permanent in nature. The project was executed from October to December 2025.

3.5. Data Collection, Analysis, and Validation

The data collected include transcripts, meeting notes, observations, photographs collected from field work, internal documents, and completed PSCBM templates. If business model components could not be deduced directly from the data (e.g. in interviews), a deductive coding strategy was applied to analyze the data, using pre-set codes to create an overview of the PSCBMs in the three cases. We applied an initial code scheme based on the building blocks (e.g., Dream, Risk, Value) and content (e.g., Mitigation Measures, Reasons, Success Conditions) to compile useful information in the data. We let codes arise when necessary to provide a full overview of the value dimensions (e.g., Consumers, End Destinations).

We used the coding scheme to conduct a descriptive analysis with the goal of providing an overview of the PSCBMs of the three cases. Once results were organized and documented according to the PSCBM structure, a follow-up meeting was scheduled to discuss and validate the interim findings with participants (see Figure 2). The final PSCBMs included the feedback provided in these validation sessions. Table 3 displays the meetings held and their respective dates. In the event of uncertainty, clarification was sought through emails or mobile phone communication with participants. All participants signed a consent form conforming to European GDPR regulations.

Table 3. Overview of data collection.

Purpose	Case	Actors	Type	Duration (approximately)	Date Session
Initial	PSS	Project leader, client, asset advisor, innovation manager, contractor	Workshop	3 h	4 June 2024
Validation	PSS	Project leader, client, asset advisor, supplier, innovation manager, contractor	Interview	1 h	21 November 2024
Validation	PSS	Contractor, supervisor, construction manager, project leader	Workshop	2.5 h	25 February 2026
Initial	NSS	Storage manager (and project leader; SM-3)	Interview	4 h*	18 July 2024

Table 3. (Cont.) Overview of data collection.

Purpose	Case	Actors	Type	Duration (approximately)	Date Session
Validation	NSS	Storage manager (SM-3)	Interview	30 min*	28 November 2024
Initial	CSS	Two storage managers (SM-1, SM-2)	Interview	4 h*	17 September 2024
Validation	CSS	Two storage managers (SM-1, SM-2)	Interview	2 h*	13 November 2025

Note: * These interviews were recorded; quotes used in this article stem from these interviews.

4. Findings

First, we provide an overview of the circular strategies identified in the cases, then we provide results in the PSCBM structure: Define Value, Deliver Value, and Generated Value.

4.1. Circular Strategies in the Different Cases

Table 4 shows an overview of circular strategies found in the cases. The circular strategies are: reuse (at the initial project site), reuse (in another project site), repurpose, refurbishment, repair, and remanufacturing.

Table 4. Overview of circular strategies found in the three cases, per material type.

Material	Reuse	Repurpose	Refurbishment	Repair	Remanufacturing	CSS	NSS	PSS
Concrete pavers	X	X (for temporary roads, e.g., in construction works)				X		
Clay baked pavers	X					X	X	
Cobble stones	X					X		
Concrete paving tiles (30 × 30 cm)	X					X	X	X
Concrete curbs	X					X	X	X
Bicycle staples and racks	X					X		
Benches	X		X			X		
Bins*	X		X	X		X		
Gullies	X					X		
Sport & playing equipment	X		X			X		
Poles	X					X		
Planters	X					X		
Gullies	X					X		

Table 4. (Cont.) Overview of circular strategies found in the three cases, per material type.

Material	Reuse	Repurpose	Refurbishment	Repair	Remanufacturing	CSS	NSS	PSS
Traffic sign bollards	X					X		
Traffic signs					X	X		
Tree protectors			X			X		
Traffic light bollards			X			X		
Lampposts			X			X		
Luminaires			X			X		

Note: * This also included refurbishment and repair at the original manufacturer, enabling circularity outside the city of Amsterdam.

4.2. Defining Value

The motivation to start with material storage for reuse at the CSS was to prevent the "leakage" of materials to contractors, who would then resell or apply them elsewhere. Also, the City's agenda includes emphasis on carbon footprint reduction of scope 3 emissions, which involves reducing the impact of material use within the city (Municipality of Amsterdam, 2024). Lastly, some reused (and new) materials are stored because the City's Daily Maintenance department has the obligation to conduct ad-hoc replacements during the asset use and maintenance phase.

In NSS, the main motivation to create storage was to contribute to the local ambition to design OPSs in the Buiksloterham transformation area with 80% circular materials. Local storage of reused materials ensures a steady supply for projects within Buiksloterham. Though there was some space reserved for Buiksloterham at the CSS, this was considered too far away to maintain a good overview of the incoming and outgoing material flows collected for Buiksloterham. In addition, the CSS storage capacity was reached rather quickly. The primary challenge is to ensure that all materials are removed from the storage space, prior to the commencement of the real estate development.

For PSS, the motivation to reuse concrete tiles and curbs is the recent municipal policy "reuse, unless," which stimulates the reuse of materials when technically feasible (Municipality of Amsterdam, 2023). Occupying a parking space 850 meters from the project was intended to mitigate potential local nuisances, given the significant parking demand. However, during execution, some parking spaces and grass near one of the flats could be used for local storage. All stakeholders' value propositions to reuse materials in the urban space are summarized in Table 5.

Table 5. Collected value propositions for the three cases.

Stakeholder	Value proposition for reusing materials	PSS	NSS	CSS
Municipality (City Council)	Circular policy "reuse, unless" is effectuated, and a contribution to circularity goals and carbon impact reduction goals	X	X	X
Citizens	Maintaining urban identity, fast replacements, fast updates to new needs during use (during use phase), and/or sustainability	X	X	X
Project leader (planning & execution)	Meeting municipal ambitions, project within budget and time, availability of reused materials	X	X	X
Landscape designer	Availability of reused materials to create a circular urban design	*	X	X
Storage managers	Storage provides the opportunity to match demand and supply		X	X
City's Asset Management department	Material meets technical requirements for another term of use, no procurement costs, no unnecessary material use	X	X	X
City's Daily Maintenance department	Fast repairs or replacements with similar (worn-out) materials, maintaining visual appeal in the streetscape			X
Public schools or allotments	Low-budget reused materials/products (e.g., playground equipment, bins, and benches)			X
Local area manager	Fulfilment of locals' needs for the OPS during the asset use and maintenance phase through replacements or accommodation of new needs			X
Contractor (external)	Fulfilment of client's (Municipality) needs and wants, and a positive assessment in a CO_2 certificate audit	X		
Carpenter (external)	Refurbishment of benches by people who are distanced from the labor market			X

Note: * No urban designer was involved in the maintenance project.

4.3. Value Delivery

If we compare the management of the different urban space occupations/uses in the cases, we observe differences in terms of value delivery in three themes: storage management, sustaining demand and supply, and pilots and collaborations.

4.3.1. Storage Management

For the CSS and NSS, similar activities are required, but the type and quantity of materials and amount of storage space vary (Table 2). The difference is that materials in the CSS are available for urban area maintenance or (re)development projects within the city, whereas at NSS materials are only destined for projects within the Buiksloterham transformation area. At the CSS and NSS, storage managers are responsible for the management of material delivery and transport. In the NSS, this is a part-time task executed by a project leader, whereas this is a full-time task at the CSS. At the PSS, a contractor takes care of storage management and transportation. It hardly occurs that projects can take over each other's materials immediately, so intermediate storage is needed. In the case of CSS, storage management remains a

challenging job because of limited storage capacity. It occurs that materials of sufficient quality to be reused are rejected because storage capacity is reached. Creating storage space at more local levels, like NSS and PSS, is useful to reduce demand for storage space at the CSS and offer the opportunity to store materials locally, saving transportation miles.

4.3.2. Sustaining Material Demand and Supply

Materials arrive at CSS due to the "reuse, unless" policy that stimulates reuse in urban area maintenance and (re)development projects, but also via the informal network of storage managers. Storage managers or material specialists visit projects to approve or reject materials for reuse by visual inspection and expert judgement. An internal digital marketplace—only accessible within the Municipality—is used to showcase available material supply at the CSS. At the PSS, a considerable risk was the disapproval of reused materials from the City's Asset Management department. Effective communication with this department is pivotal. Moreover, in order to sustain the demand for reused materials, landscape architects or project leaders should select materials from the CSS—or within the Buiksloterham area from the NSS—and/or from within their urban area maintenance or (re)development projects (e.g., PSS) and incorporate reused materials into their urban designs.

4.3.3. Pilots and Collaborations

Since 2022 at CSS, the storage managers have invested in professionalizing activities and exploring opportunities to further increase the reuse of materials by piloting collaborations. These collaborations can be both with internal parties (like the social return labor force within the Municipality) as well as seeking collaborations with external parties. Internally, they had a small crew refurbishing fixtures and repairing bins, before returning these into the city. Externally, a long-lasting collaboration exists between an industrial coating company and a street furniture supplier to repair and refurbish lampposts. They also piloted a collaboration with a traffic sign supplier to remanufacture traffic signs by replacing no longer valid reflective stickers. They also partner up with a contractor that sorts, packages, and stores baked and concrete pavers. Lastly, they collaborate with a carpenter who repairs benches together with people distant from the labor market. In the NSS case, for pavers that cannot be processed by the contractor, like concrete tiles, other contractors are paid to sort, collect, and transport these products to the NSS. At the PSS, the contractor that is responsible for the execution of the project takes care of all activities for reuse: managing storage and handling. The project was also used to test a nano coating as a protective measure for concrete tiles to maintain longevity and patina.

4.4. Generated Value

From the data we collected, we distinguished four different domains of value creation: public, environmental, economic, and social value. Table 6 provides an overview of the value created in the different cases through the circular strategies applied (see Table 4). We observed that value creation was provided by the materials reused and the activities executed.

Table 6. List of values created from the circular strategies applied in the different cases.

		Case					
Stakeholder	Value Domain	CSS	NSS	PSS	Value	Benefits	Costs
Local citizens	Public	X	X		(Unique) aesthetics	Nice outlook (e.g., vintage outlook of pavers)	
Local citizens	Public	X	X	X	Satisfaction	Citizens' acceptance	Citizens' disapproval
Municipality	Public	X	X	X	Responsibility	Municipal goals achievement, good image	Deterioration of municipal image
Local citizens	Public	X			Historical/cultural meaning	Maintaining city identity	
Municipality	Public	X			Functionality	Increased material quality (e.g., strength increase in case of concrete tiles)	
Municipality	Public	X	X	X	Budget efficiency	Avoided costs of purchasing new material	Costs related to activities* to reuse, repair, refurbish, or remanufacture
Municipality	Public	X			Budget efficiency	Efficient use of municipal trucks for transport of reused materials/products	
Local citizens	Public	X			A safe, functional, and responsive OPS due to having stored reusable material for repairs/replacements	(Immediate) available material supply (i.e., you avoid delays from new material supply)	

Table 6. (Cont.) List of values created from the circular strategies applied in the different cases.

		Case					
Stakeholder	Value Domain	CSS	NSS	PSS	Value	Benefits	Costs
Society/Nature	Environmental	X	X	X	Resource efficiency and impact avoidance	Material and carbon footprint reduction because virgin material use is avoided	Material and carbon footprint of activities* to reuse, repair, refurbish, or remanufacture
Municipality	Economic	X	X	X	Material value retention	Functional lifespan** extension through reuse, repair, refurbishment, or remanufacture	
Workers	Social	X		X	Reintegrated labor	Learning, reintegration	
Local citizens	Social	X			Social Cohesion***	Sense of collaborative ownership	
Value chain actors	Social	X	X	X	Collaboration	Collaborative efforts to make success stories	
Value chain actors	Social	X	X	X	Knowledge assimilation	Learning by doing (otherwise, in case of inaction, missing out on opportunities to learn)	

Notes: * Activities that involve, for example, transport, cleaning, coating (PSS), storage creation (NSS), operation & management (CSS, NSS); ** functional life span = time that material is in use before reaching technical life span; *** this was the case for reuse of planters—because the Municipality had contracted an external party for planter maintenance, planters that are reused are maintained by locals.

4.4.1. Economic, Environmental, and Social Value

Economic value is created by prolonging the functional lifespan: Keeping materials in use for as long as possible avoids procurement costs of new material. Environmental value is created because of the high embodied environmental impact of the materials. Most materials or products are made of aluminum, clay, steel (i.e., energy-intensive production), natural stone (i.e., mining operations), or concrete (i.e., cement and sand use). Reuse saves environmental impact by eliminating new primary material demand. Social value is created through the employment of people distanced from the labor market for refurbishment activities (e.g., street bench refurbishment by a third party). On the CSS, storage managers perceived this as unlocked potential. As SM-1 explained, small tasks like cleaning and painting lanterns, cleaning and repairing benches, but also refurbishing bicycle racks and planters could be done by people distant from the labor market. At the PSS, the contractor was bound by the stipulation to allocate only 2% of the commission to social return labor. Another form of social value creation is knowledge assimilation from learning by doing. Lastly, undertaking efforts to reuse materials contributed to a feeling of success (i.e., contributing to the municipal circularity goals) and frugality (i.e., not being wasteful). Regarding aesthetics, reused materials provided in some situations the opportunity to maintain the existing urban area patina (e.g., avoiding a patchwork pattern by replacing broken tiles with old tiles). Meanwhile, the historical and cultural meaning of antique lampposts was preserved through refurbishment. Lastly, social cohesion was created through citizens maintaining reused bins, benches, or planters. As SM-1 (CCS) explained, "In the neighborhood plan, it is discussed that the local residents will maintain the [reused] planters and they really like that."

4.4.2. Public Value

We found in all cases the contribution to local municipal circularity and environmental impact reduction goals, creating public value in terms of responsibility. Reuse is in line with current local policy and is considered an opportunity to act responsibly. In addition, reuse holds the potential to maintain urban identity and quickly restore and reshape the OPS to fulfil local citizen needs. As SM-1 (CSS) stated, "If you need to order something new…that could take up to a month to deliver, but if we have something in stock that can be reused…that is available…we can resolve it immediately." The aesthetics of reused materials are regarded as context-dependent and also dependent on one's perspective. In all cases, it was suggested that there are most likely citizens who prefer new materials over reused materials. But, there are also cases in which citizens prefer to reuse materials instead. As SM-1 (CSS) illustrates, "We had a little project and we didn't have enough pavers to reuse. A piece was added with new materials. Residents complained about it; they wanted pavers to be reused." Also, SM-3 (NSS) explained, "We also have some residents here in the neighborhood who find sustainability very important. And then also appreciate it very much if you will also work very sustainably in the public space."

Budget efficiency, as part of improvements in resource efficiency, involves monetary costs and benefits. Materials in the urban space are not necessarily always used until their technical lifespan is reached. Overall, though the exact costs spent on activities required to reuse are not exactly known, reuse saves money by avoiding procuring new materials, and is particularly noteworthy for high-priced products (i.e., outdoor sport equipment, playground equipment, or baked pavers). Besides, on the CSS, the transport of reused materials contributes to the use of otherwise un(der)used transport vehicles. For the PSS and NSS, reuse decreases transport distances, as both storage spaces are locally organized. It remains undetermined whether reuse

requires increased maintenance, such as the need for more frequent road maintenance, when compared to the application of new materials. This is illustrated by SM-1: "Because a new street is guaranteed for 30 years. So if you say, I'll use the [concrete] tiles [in sidewalks] for 20 years, then the management costs will be higher, of course, in case you have to replace earlier."

For the CSS, costs are covered internally within the Municipality; receiving projects do not pay for the materials. Like SM-1 (CSS) explained about the stored bench for reuse:

> We take it [the bench] to the [destination] place and tune it there and we make a distribution slip. It [the bench] comes from this storage [the CSS], for a zero value price. It has already been paid for once and it will also go out for zero. There is no revenue model to it.

Costs for creating and managing the NSS are covered by previously reserved budget in the land surfacing account. The land of the NSS is still owned by the Municipality. The Municipality will transfer this land to a project developer as soon as the plans are final and there is a prospect of realization. Nothing is paid for the use of the land during the occupation. The PSS is covered in the maintenance project budget.

4.4.3. Tracing Impact

Though many forms of impact can potentially be measured and calculated, only a few impact indicators are used in the cases to track progress. Indicators are predominantly tracking environmental and circularity goals. At the PSS, the project manager is obliged to indicate the amount of materials reused to calculate the total environmental impact of the project via a material emission tool developed by the City's Asset Management department. The tool calculates the percentage of circularity within the project and the environmental benefits using product environmental cost indicators. In addition, the contractor has its own KPIs for progress on reuse, collaboration, and staying within budget. Within the NSS, collected materials are tracked in an Excel spreadsheet. The storage managers of the CSS have a system to bill incoming and outgoing reused materials.

5. Discussion

Our findings indicate that the (temporary) use of urban space plays a crucial role in enabling reuse in OPSs, being a temporary storage space for reclaimed materials. Hence, intermediate storage is needed for using reused materials in buildings (Tsui et al., 2021), but also for reusing materials in OPSs. The cases show exemplary spatial–temporal interplays in which the ability to reuse materials is made possible by intermediate storage, which also results in economic, social, environmental, and public value creation. As a contribution to the academic debate, this research puts forward the argument that urban space use contributes to multiple value creation (public, social, economic, and environmental) by providing temporary storage for materials that can be reused, repurposed, refurbished, repaired, or remanufactured to be applied in OPSs.

5.1. Temporary Space Use to Recirculate Materials

Amenta et al. (2022) found that the reuse of abandoned and underutilized urban spaces can drive sustainable urban transformation. Our findings indicate that (temporary) space use contributes to

sustainable urban transformation in OPSs. Space use in close proximity to urban area maintenance or (re)development projects (e.g., PSS, NSS) facilitates reuse locally and reduces transport miles. A more permanent, large central storage space (e.g., CSS) provides the city with an opportunity to collect materials to be reused/refurbished/repaired/remanufactured across the city and professionalize the storage management and organization, for example by tracking the in- and outflow of materials and exploring collaborations. It also provides an opportunity to maintain reused material stock for (ad-hoc) replacements and repairs, and to collect a diverse range of materials and products, including unique pieces.

Based on the empirical findings of this study, Figure 4 visualizes the spatial–temporal interplays within the city in comparison to Figure 1.

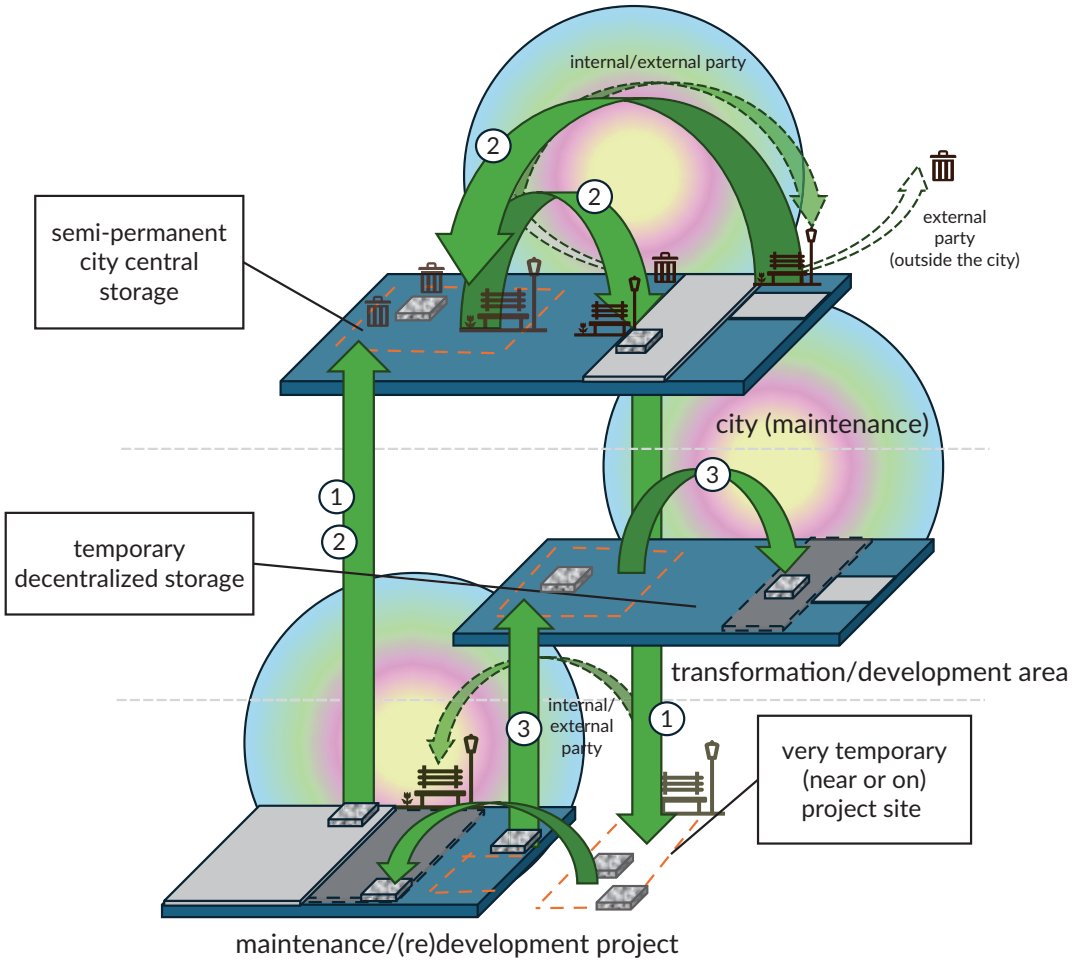


Figure 4. Overview of the spatial–temporal interplay of the different urban space uses that facilitate temporary storage for reuse based on the empirical findings: (1) material exchange between projects and central city storage for maintenance or to projects; (2) material exchange from projects to the central city storage to fulfil maintenance & replacements; (3) material exchange between projects within the city and projects within a transformation area. All enable value creation in the four domains: social, environmental, economic, and public value.

Studying Brussels as a case, Baumgartner et al. (2024) observed that local governments did not show willingness to take land off the market to facilitate circular activities. However, their study entails a more

permanent occupation of land, whereas in our study we indicate the potential for temporary use of land in a transformation area (as a result of a postponed development) to store reused materials (e.g., NSS). Hence, our findings indicate that temporary use of land can also facilitate circular activities.

Furthermore, our findings show that all urban space uses contribute to public, social, environmental, and economic value creation. Congruent with previous studies in the built environment, public value is created through achievement of CE goals (Van den Berghe et al., 2020) and maintaining historical and aesthetic value (I. D. Williams et al., 2025). In academic literature, a linkage already exists between the preservation of urban identity and adaptive reuse of cultural heritage buildings (Foster & Saleh, 2021) and urban space design (Tzortzi & Saxena, 2024). Besides, circular use of products creates social, environmental, and economic benefits (Vulsteke et al., 2024), likewise in the application of circular strategies in the built environment (Ho et al., 2024). Also, Lundgren et al. (2024) report that the adaptive reuse of a building saved embodied energy and carbon through the reuse (i.e., keeping intact) of the concrete structure and bricks. In the OPS, reuse of materials saves embodied energy and carbon likewise.

Regarding aesthetics, perceptions can differ among citizens. Though some examples of reuse specifically show the appreciation (or even request) of locals for reused materials because pavers nicely match the aesthetics of the existing urban area patina, some examples show objections to reuse. This is in line with Horton (2012), who argues that the interpretation of reused materials in their context can be perceived differently and can suffer from "discrimination against waste."

5.2. Limitations

5.2.1. Appraising Value Creation

During our assessment of value creation, we found a mere account of what participants perceived as benefits and costs according to their practice and knowledge. Value in relation to sustainability is dependent on the stakeholder's perspective and is context- and time-dependent (Neesham et al., 2023). Also, others in the public value debate have acknowledged the importance of human perception in what they regard as valuable to society (Meynhardt, 2019; Talbot, 2011). This valuation is partly embedded in societal and municipal targets, strategies, and policies, but also in what public officials regard as valuable based on their preferences, tasks, and responsibilities. This is also the case for citizens who can(not) appreciate sustainability (n)or aesthetics. Some citizens may dislike the aesthetics of reuse, while others prefer it over new. In urban area maintenance and (re)design projects, multiple stakeholders are involved who all have certain preferences in design, execution, use, and maintenance. However, some value creation is more objective, like maintaining urban identity, environmental impact reduction, primary material use, and financial costs. What is considered of value involves, for some categories, subjectiveness and limits the immediate generalizability of the listed created value (Table 6) to other contexts, as in other contexts other things may be of value. Hence, Table 6 rather prompts the direction of value generation abilities of urban space use to reuse materials within the OPS, and is not an exhaustive account. It is a mere account of what is considered of value in the research context.

5.2.2. Further Research Recommendations

To understand the value of the use of (temporary) available public space to facilitate the circulation of materials in the OPS, we used a PSCBM framework. This framework has been useful for the purpose. However, we understand that value cannot be separated from the beneficiary. Further research could put more emphasis on what value is created for whom. Lastly, in the public value domain, value is related to ambitions, targets, strategies, and policies, which are captured in internal (and sometimes external) documents. Also, internal and external actors across the value chain have their own needs and preferences based on their strategies and plans (e.g., company strategy of a contractor or asset maintenance plan). For further research, we encourage assessing value according to these documents as well. In light of our insights, assessing value creation comes with a context-based validity and approach.

6. Conclusion

This study aimed to explore the value of using urban space for reuse within the OPSs. We applied a PSCBM framework to understand the value defined, delivered, and created. We analyzed three cases with different spatial–temporal interplays of urban space use to enable the reuse, repurpose, refurbish, repair, and remanufacture of materials in OPSs. All these spatial–temporal interplays contributed to public, social, environmental, and economic value creation.

We aimed to answer the research question: How could different (temporary) urban space uses promote circularity in the outdoor public space and create value? In summary, short-term occupation of urban space in close proximity to urban area maintenance/(re)development projects can help store materials that are to be reused in projects, creating value predominantly through reducing transport distance, and limiting the need to occupy central storage space. Medium-term occupation of urban space near a transformation area to temporarily store materials to be reused creates value through securing material availability for local projects and meeting the local circular ambitions of the area. However, long storage times hinder efficient management due to limiting material throughput. Long-term occupation of urban space to circulate materials within the city creates value through location centrality and large storage capacity. The location is internally known and provides opportunities to professionalize the organization and to set up longer-term collaborations with other parties to implement circular strategies for various materials/products.

The findings of this study lead to several implications for the academic debate. First, we underscore the claim of Verga and Khan (2022) that space is a key urban resource that can enable circular activities within the city. We add to this debate more specifics on how space is used in cities to circulate materials to create circular OPSs. Particularly in densely populated areas, the use of urban space for circularity purposes poses significant challenges and prompts critical questions regarding the optimal allocation of urban space. For this reason, we aimed to establish an understanding of the value opportunities of urban space uses with different spatial–temporal interplays. Second, we stress the value opportunity of using temporary vacant spaces in transformation areas. Given the nature of urban development, in which occasionally developments are being postponed, this results in the availability of temporary vacant urban spaces. These temporarily available vacant urban spaces present the opportunity to serve as storage spaces to temporarily store materials to be reused in OPSs. This temporal use of urban space underscores the importance of "circulation of space" to optimize space use to facilitate the circulation of materials within cities (Pekdemir et al., 2025). Lastly, more

permanent occupation of space for central storage can contribute to circularity in OPSs, which requires, following J. Williams (2020), a more prominent role for spatial planning to facilitate circular activities.

This study has implications for practice beyond the case study context. First, spatial planners can use our findings to more structurally organize their activities to work towards a circular built environment, using the urban space (temporarily) and including circular ambitions into their spatial strategies. Second, project leaders concerned with urban area maintenance/(re)development projects are encouraged to explore any opportunities of using (vacant) urban space to temporarily store materials in their projects. Ultimately, (temporal) urban space use has value opportunities to enable a sustainable urban transition towards a circular city and create circular OPSs.

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Conflict of Interests

The authors declare no conflict of interests. In this article, editorial decisions were undertaken by Chiara Mazzarella (TU Delft).

Data Availability

The findings of this study are based on projects and activities conducted within the Municipality of Amsterdam. No separate dataset has been published.

LLMs Disclosure

The authors declare that AI-based language tools (ChatGPT and DeepL Write) were occasionally used for language assistance to improve sentence structure only. The content, analysis, and conclusions were developed entirely by the authors.

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Embracing the Liminality of Common Spaces: A Proposal for an Analytical Framework to Interpret Temporary Uses

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Abstract

In the recent academic debate, common spaces have been conceptualised as threshold and liminal spaces where proximity acts as an enabler for people to co-manage local resources and reclaim the right to the city. Within this debate, temporary uses can be seen as a mechanism to co-create common spaces by testing solutions based on local needs assessment in a way to reconcile a multiplicity of stakeholders' values. Temporary uses can aggregate networks of stakeholders towards the transformation of abandoned real estate assets, contributing to the sharing of a duty of care. Even though they are time-bounded, temporary uses leave urban spaces on the threshold of transformation. They can generate social values for participants and communities; however, these values are hard to capture in traditional evaluation metrics and might be susceptible to co-option to increase market values over social values. This article aims to provide empirical evidence—based on a case study in Forlì, Italy—about the role of temporary uses as a device to aggregate communities and to negotiate a shared identity of the re-use intervention on real estate abandoned assets. We propose an interpretative analytical framework to understand the effects generated by temporary uses for the involved stakeholders, understanding how social values are co-created through temporary uses processes and distributed at the community level.

Keywords

analytical framework; co-management; common spaces; social value; temporary uses

1. Introduction

In an ever-changing world faced with grand societal challenges, participatory approaches to urban planning are crucial to counteract the exacerbation of inequalities and phenomena of gentrification and displacement

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(Dell'Ovo et al., 2026; George et al., 2024). Cities must be capable of innovating governance models for urban spaces to usher participation (Bishop & Williams, 2012). New approaches to encourage civic participation are needed, and so are tools to evaluate their multi-dimensional effects (Assumma et al., 2021; Stanganelli et al., 2021). Temporary uses have been envisioned as an experimental and time-bound solution to urban voids, through innovative forms of urban governance and community participation (Chang & Gerrits, 2022).

Most European cities present two antithetic trajectories: the progressive dismissal of former industrial areas, perceived as urban voids, and the increase of real estate development that can lead to gentrification and displacement issues (George et al., 2024; Kip & Oevermann, 2022). At the intersection of these two, the rehabilitation and management of abandoned real estate assets represent a way to catalyse urban interventions to generate positive social values (Kip & Oevermann, 2022). The adaptive re-use of dismissed industrial heritage is an urban regeneration strategy that combines the preservation of historical and cultural value with environmental sustainability and economic revitalisation (Cossons, 2012; Kip & Oevermann, 2022). From an ecological perspective, preserving and repurposing existing structures requires significantly less embodied energy than demolition and reconstruction, reducing environmental impact (Burkhard et al., 2012). However, industrial sites often pose critical issues related to soil contamination that require costly remediation. Economically, the high initial costs of acquisition, conversion, and regulatory compliance provide significant barriers, especially for smaller towns (Russo & Linkon, 2009). The social dimension is perhaps the most critical aspect. While re-use can revitalise degraded neighbourhoods by reviving practices of solidarity and inclusion, it can also trigger gentrification processes that marginalise long-standing residents, making equitable planning strategies and authentic participatory processes that preserve local communities' decision-making power essential (Kip & Oevermann, 2022; Russo & Linkon, 2009). The main challenge lies in balancing these dimensions through transdisciplinary, context-based, and value-based approaches that respond to the specific characteristics of the territory and the communities' value systems.

Against this background, temporary uses offer a means to enable the transformation of such spaces by offering opportunities to collaboratively address local challenges while contributing to the characterisation of these spaces as spaces for discussion about the future of the city (Bollier & Helfrich, 2019; Harvey, 2012). These can be considered common spaces according to the definition provided by Stavrides (2015). In common spaces, proximity acts as an enabler for people to co-manage the space while addressing the relationship with material or immaterial local resources (Bollier & Helfrich, 2019).

Despite the relevance of temporary uses in transforming approaches to urban planning, their use is still scattered and highly dependent on municipal activism and local strategies (Lanzoni & Martínez, 2024). Academic literature has widely discussed the transformative capacity of temporary uses to promote community participation by increasing the horizontality of practices (Bishop & Williams, 2012; Lanzoni & Martínez, 2024), and their effect to catalyse and incubate social impact, by increasing the sense of belonging and social inclusion (Madanipour, 2018). Other authors have focused on the enabling or inhibiting conditions that influence the implementation of temporary uses and the kind of legacy that they leave in the territory (Chang & Gerrits, 2022; Martin et al., 2020). However, little attention has been paid to temporary uses as a mechanism to create urban threshold spaces. This article aims to answer the question of whether temporary uses allow the creation of threshold spaces, and under which conditions they can generate values for the communities and embed them in future urban regeneration trajectories. This article provides empirical evidence—based on the case of EXATR in Forlì, Italy—about the capacity of temporary uses to

generate and distribute social values while creating the identity of the re-use intervention. Building on the results from our research, we propose an analytical framework to interpret the depth of collaboration among local stakeholders and the effects generated by temporary uses, understanding how values co-created by participants in temporary uses are distributed at the community level. The analytical framework leverages the determinants identified in this case, providing guidance on how to assess the legacy of temporary uses.

2. Research Background

Temporary uses are understood as provisional appropriations of vacant urban spaces for a limited period of time, promoting co-production outside conventional market logics to enable the generation of societal outcomes (Bishop & Williams, 2012). Interventions as such are characterised by a high degree of adaptability, showing the potentials of new uses in response to societal needs (Bishop & Williams, 2012; Martin et al., 2020), catalysing urban transformation and community engagement through low-budget strategies (Bishop & Williams, 2012). However, temporary uses can also usher real estate interventions, by increasing market values and the appetite for investment by developers (Madanipour, 2018). This exacerbates the tension between redevelopment pressures and the re-appropriation of abandoned urban spaces, potentially promoting market dynamics against societal value.

The capacity of temporary uses to improve the quality of urban regeneration has been widely discussed in the literature. Scholars have focused on the capacity of temporary uses to promote the re-appropriation of economic, social, and cultural resources from the speculative efforts of the market (Chang & Gerrits, 2022; Rauleac, 2020). Further research explored the experimental capacity to temporally test different concepts for the reactivation of abandoned urban assets (Bishop & Williams, 2012), and to promote community engagement strategies in regeneration processes (Foster & Iaione, 2020). As such, temporary uses work as social incubators to develop local networks and participatory practices (Bishop & Williams, 2012; McArdle, 2020), or as a platform for neighbourhood-based dialogue to reconcile different positions of community members, creating shared solutions for urban development (Bollier & Helfrich, 2019; Madanipour, 2018).

Urban strategies based on temporality can enable liminality by counteracting the idea of pre-defined functions of regenerated spaces, placing the values of participants above market-driven needs (Stavrides, 2015). This is not automatically generated but depends on the capacity of participants to orchestrate such results and to avoid the capturing of the values co-created (Madanipour, 2018). Being able to embrace this liminality increases the capacity of interventions to promote an open discussion about the valorisation of assets without recurring to market-based strategies. Against the current development of urban research, temporary uses can promote a counter-hegemonic response towards the development of the city. However, no previous attempts aimed to develop an analytical framework taking into consideration both the process of organising communities and the co-creation of values through temporary uses.

2.1. Temporary Uses, Liminality, and Collaboration

Temporary uses often emerge in contexts of urban vacancy, where market-driven development is not able to address local needs (Bishop & Williams, 2012). They can activate resources towards adaptability and circularity in the management of abandoned urban spaces (Roversi et al., 2021), while contributing to the generation of non-market value acting against commodification of the city (Bishop & Williams, 2012). As such, temporary

uses enable collaborative processes, increasing the liminality of urban action and contributing to the creation of threshold spaces for civic activism (Bollier & Helfrich, 2019; Stavrides, 2015).

To be effective, interventions as such need to be supported by external actors—e.g., public administrations, the building owner, private developers interested in the area—and participants must be capable of not falling into the co-option trap whereby their work is used to justify future exploitation of urban resources for market-based transformation (Madanipour, 2018; Roversi et al., 2021). In this lies a balancing act of temporary uses in addressing the market dynamics and navigating different, and eventually conflicting, interests among local actors. Collaboration is key in order to mix stakeholders' logics and to address concerns about future re-privatisation of the urban spaces object of intervention.

Collaborative urban interventions rely on different factors that could facilitate or hinder the capacity of temporary uses to produce a positive social value for local communities, reclaiming the right to the city against market exploitation (Harvey, 2012; Madanipour, 2018). Defining them is crucial in the development of an analytical framework as the one we aim to introduce. At first, we find intrinsic factors that provide challenges or opportunities to implement strategies based on temporary uses (Chang & Gerrits, 2022; Martin et al., 2020). These can be addressed as context determinants regulating the framework in which temporary uses move (Bishop & Williams, 2012; Martin et al., 2020). Secondly, we have the resources of the stakeholders participating in temporary uses initiatives. These can be addressed as characteristics of the stakeholders that influence their way of sharing resources and lead to different collaborative mechanisms based on social capital and the capacity to represent the general interest over vested interests (Madanipour, 2018; McArdle, 2020).

The combination of these factors influences collaboration through temporary uses, activating different mechanisms towards the creation of stakeholders' networks (Foster & Iaione, 2020; Martin et al., 2020). These mechanisms are crucial levers for interaction among stakeholders, and they can be valued as process outcomes showing the potential of temporary uses to enable liminality, while addressing the identity of the intervention to prevent future co-option (Madanipour, 2018).

2.2. The Legacy and Values of Temporary Uses

It is not unrealistic that temporary uses can leave a legacy at the territorial level. They increase the physical quality of abandoned spaces by offering new public areas (Martin et al., 2020)—including gardens, urban beaches, squares, among others—as the case of Tempelhof Airport in Berlin. Started as temporary uses to increase the availability of green areas, the former airport became a new public space through combinations of civic activism, community mobilisation, and innovative institutional arrangements (Dubeaux & Cunningham-Sabot, 2016). Temporary uses also activate threshold spaces (Foster & Iaione, 2020; Stavrides, 2015)—e.g., civic and community centres, cultural hubs, among others—as it happened in Madiba in Rimini. Here, the combination of squatting and community-based urban development promoted the development of new forms of local welfare through the creation of common spaces, counteracting the market-based exploitation of urban regeneration projects (Rauleac, 2020). On the other side, temporary uses can lead to an increase of real estate market values, or they can trigger local economic development (Mazzarella & Remoy, 2024; Rossitti et al., 2023). While this could subtract values to the local community and activate re-privatisation processes (Madanipour, 2018), previous studies only identified an indirect contribution to

accelerate ongoing regeneration processes and to the increase of real estate market values (Rossitti et al., 2023).

Interventions employing temporary uses can leave an institutional legacy when the experimentation of collaborative governance models results in policy innovation or the adoption of new forms of partnerships for the city (Bollier & Helfrich, 2019). The creation of such legacies is strongly influenced by local regulatory frameworks promoting horizontal practices. In turn, when these are not present, the legacy of temporary uses can be captured by real estate developers that benefit from the improved market values by excluding local communities from decision-making processes (Chang & Gerrits, 2022).

These forms of legacy are felt differently across contexts, and they entail a differentiated recognition of social values by participants (Chang & Gerrits, 2022; Madanipour, 2018). Understanding the values co-created through temporary uses is a way to address the legacy of such interventions, moving beyond traditional evaluation models employed in urban regeneration projects (Cerreta & La Rocca, 2021). This allows for capturing the interconnections between the collaboration mechanisms and the effects they generate at the local level.

3. EXATR: A Common Space Enabled by Temporary Uses

In Italy, common formats of temporary uses include pop-up cultural spaces, creative hangars, temporary markets, and public art installations, serving as catalysts for social innovation and spatial justice (Cariello et al., 2021). Such interventions often intersect with tactical urbanism, emphasising low-cost, reversible intervention and community engagement by enabling proximity-based planning (Casprini et al., 2026; Rossitti et al., 2023)—although, as discussed above, interventions as such could usher real estate development if their legacy is not correctly addressed. Against this paradigm, we selected the case of EXATR in Forlì for two reasons: It can be considered a common space enabled by temporary uses (Stavrides, 2015); and it contributes to the understanding of the conditions under which temporary uses can contribute to generating social values and embed them in long-term projects.

EXATR is a hub that connects creative and cultural industries, arts, universities, and local enterprises. Today, it can be defined as a place for cultural production characterised by a social purpose of promoting culture and live performance as means for participation in urban regeneration. EXATR is a project that promotes the re-use of the former city's bus depot in Forlì, leveraging the power of human and cultural connections to address the issue of the abandonment and collaborative revitalisation of symbolic places. EXATR offers cultural connections between the past and the present of the depot and the territory, promoting a dialogue between communities, associations, artists, and the public administration. The bus depot, as shown in Figure 1, is located on the outskirts of the walled city in Forlì, at the hinge between a social housing neighbourhood and a former industrial area, recently redeveloped.

The depot remained unused for more than 10 years, until 2010, when it attracted the attention of Spazi Indecisi (SI) and Città di Ebla (CdE), two local associations. CdE—a theatre and performative arts association—was looking for a location to host the festival IperCorpo, while SI—a social innovation and urban regeneration collective—was mapping abandoned spaces in the Romagna sub-region as part of the project Cicli Indecisi (Undecisive Cycles). At the time, the owner of the depot was ATR—the local

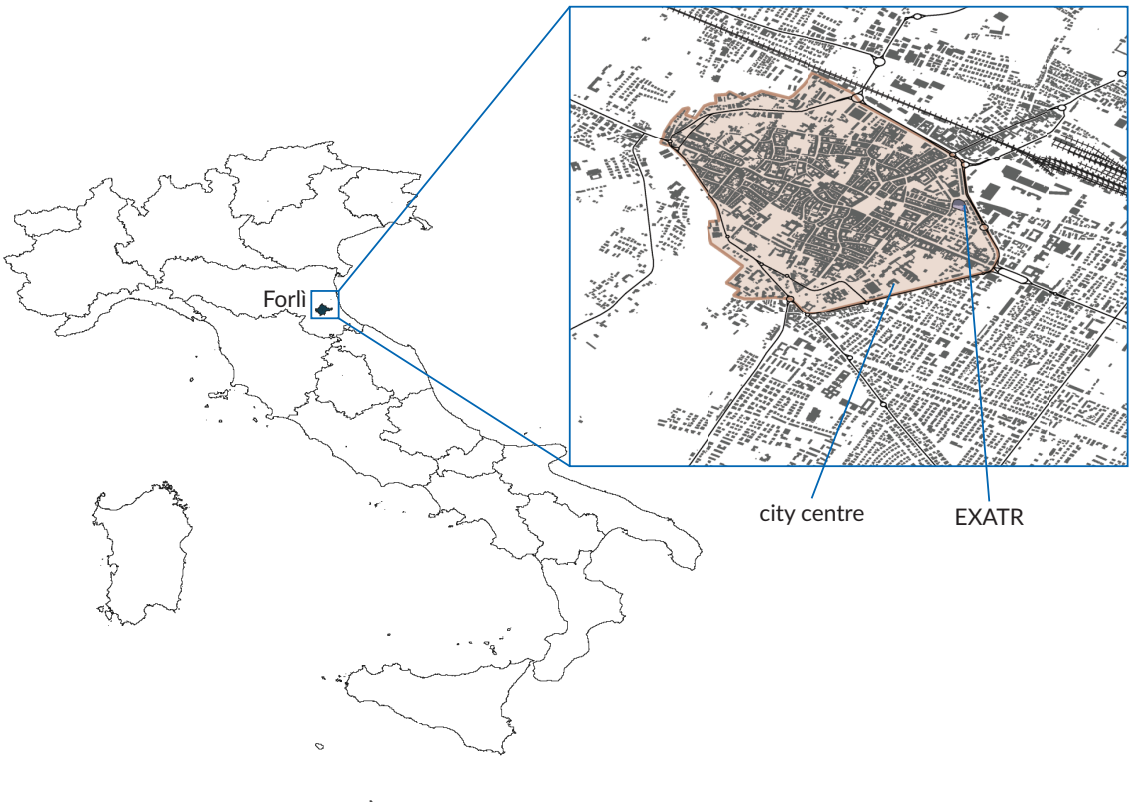


Figure 1. Location of EXATR in Forlì.

publicly-owned transport company—that closed the depot in via Ugo Bassi to open a larger one just outside the city. Following 10 years of abandonment, the depot was in a state of degradation, although still integral and safe to be used.

Each organisation individually approached ATR to ask for permission to use the space. Access to the depot was granted for 1 day per organisation in 2010. Following this initial experiment, CdE and SI recognised that only through collaboration could they achieve their individual objectives to reactivate the former bus depot. In 2011, as reported on EXATR's website (https://exatr.it/storia), the two organisations jointly signed a three-year temporary use agreement with ATR in order to experiment with different ways to implement their vision while promoting a discussion about the value of the depot for the neighbourhood and about how to promote open participation in cultural production and urban regeneration.

During these three years, CdE and SI built and strengthened their relationship, and developed a combined strategy for community participation in the co-production of activities and co-management of the depot. As a result, CdE involved SI in the 2011 edition of the festival IperCorpo to understand how to embody the identity of the festival in a culturally rich asset, while using it as a tool to attract new audiences. During these three years, the two associations co-created a series of events to collect memories about the ATR depot from former employees and community members, as well as several engagement workshops to develop ideas about how to re-use the depot, as reported on EXATR's website. This gave birth to Inno al perdersi (A call to get lost), a cultural program to celebrate the abandoned heritage of Romagna, promoting the idea that abandonment, such as use, is a temporary status that can be changed at any time.

Thanks to the experimentation brought by the temporary uses, SI and CdE reinforced their re-use strategy towards the transformation of the depot into a common spatial resource. In 2013, the two associations proposed to the municipality of Forlì a project to valorise the depot for cultural production, answering a bid from the Emilia Romagna region. At the same time, a consortium of local businesses presented an alternative project to be submitted to the same bid, proposing to transform the depot into a hub for start-ups and R&D activities. Given the positive results achieved by the temporary uses, the then mayor opted for the project developed by the two associations, considered to be the right way to innovate cultural practices and promote a discussion about the heritage value of the depot, offering "a vision and a platform to co-create a project," as it emerged from the bid documents.

The project was approved, providing the two associations with funding to be invested in the renovation of the space, with an obligation to establish a temporary association (Associazione Temporanea di Scopo, ATS) with the municipality. This created a legal framework to formalise the relationship between the two associations, the municipality, and ATR as the owner of the depot. Thanks to this governance arrangement, the ownership of the depot passed to the municipality of Forlì, which granted it rent-free to the two associations with the obligation to sustain expenses related to management and ordinary maintenance of the building, as reported in the agreement. This represents a way to formalise the experimental governance structure of the temporary uses, ensuring that the depot can be used for social and cultural purposes in line with the general interest, limiting the possibility of lucrative interventions.

Unfortunately, in 2015, the depot was closed due to safety issues. This required a massive structural intervention exceeding the grant obtained through the regional fund. The depot opened again in 2017 with renewed enthusiasm. With the re-opening of the depot, SI and CdE created the living lab Linee di Rigenerazione (Regeneration Lines), using the metaphor of the buses connecting the city to understand how the new uses of the depot can connect different members of the local community and promote sharing of knowledge and practices to implement interventions in the neighbourhood. As of today, EXATR has become a reference point for the local culture and art scene, hosting several festivals that are co-created by SI and CdE with other local organisations, including MeettheDocs! and EXTRATERRESTRE, while being the home of IperCorpo, which reached its 21st edition in 2025.

The timeline in Figure 2 synthesises the main phases of the reactivation of the depot.

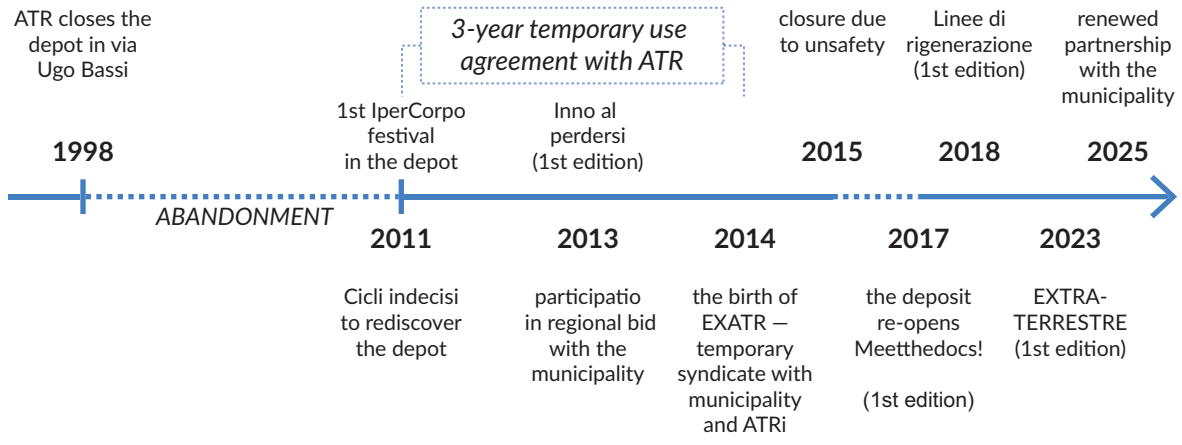


Figure 2. Timeline of interventions in EXATR.

4. Methods and Materials

Our research only refers to the period of the activation of the re-use intervention that led to the creation of EXATR and its implementation of different experimentations through temporary uses, while looking at the legacy it created for the neighbourhood. Focusing on this helped us to determine the different context conditions, collaborative mechanisms, and values created through temporary uses, in an attempt to define the conditions under which the temporary uses in EXATR contributed to the general interest. Given the characteristics of the case, and consistently with our objectives, we adopted a multi-disciplinary and multi-method approach. In a peculiar case such as this one, combining different methods empowered us to explore different temporal phases of the interventions and offered a way to gather information from multiple sources (Yin, 2014). Mixing historical interviews with document analysis and participant observations allowed us to develop an in-depth understanding of the components that allow temporary uses to generate positive societal outcomes at the local level. Furthermore, we strived to maximise the involvement of stakeholders as key informants as well as collaborators in the sense-making and validation phases of the research to increase acknowledgement of results (Leavy, 2017). A synthesis of the phases of the research is presented in Figure 3.

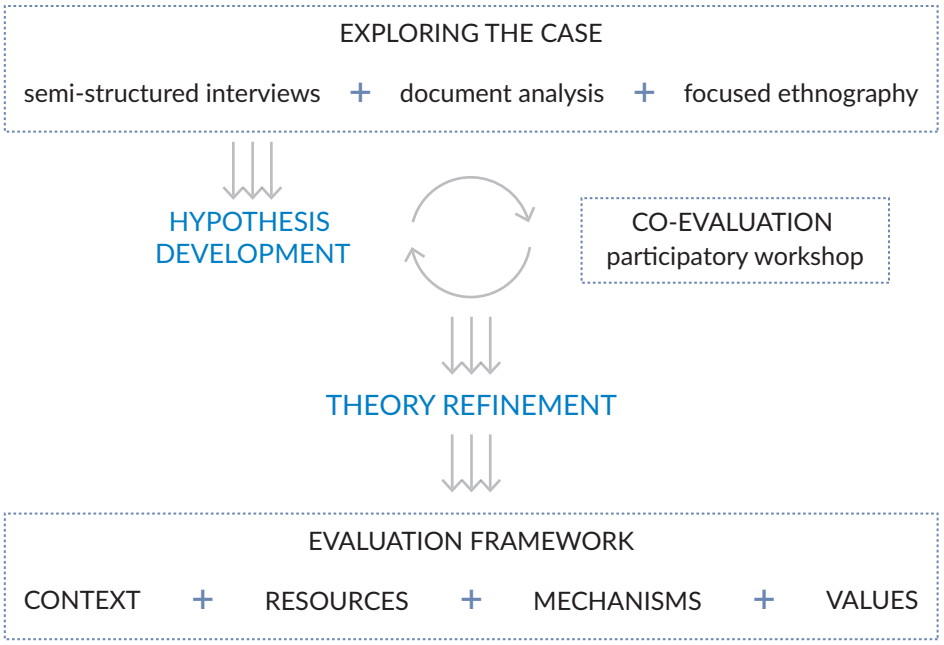


Figure 3. Research path and methods employed in the case study.

Throughout the different steps of the research, we involved different stakeholders in the data collection process in order to increase the number of perspectives on the implementation of temporary uses and their effects. The list of stakeholders involved is presented in Table 1, which synthesises their interests in the projects, their individual values, and the ways in which we engaged them in the research.

Table 1. List of stakeholders involved in temporary uses in EXATR and in the research process.

Stakeholder	Interests	Values	Engagement in research
Spazi Indecisi (SI)—Local association interested in participatory urban regeneration	Increase awareness about the value of abandoned spaces Contribute to the innovation of local service provision	Participation; inclusion; mutuality; collaboration; cultural and historical value of the building; entrepreneurship	Interviews Validation workshop
Città di Ebla (CdE)—Cultural association active in the field of theatre and live performance	Use the space to organise cultural festivals Promote a discussion about what to preserve and for whom	Participation; collaboration; creativity; cultural and historical value of the building; entrepreneurship	Interviews Validation workshop
Municipality of Forlì	Contribute to the well-being of citizens and to the vitality of the city	Social cohesion; inclusion; cultural value of the building	Interviews Validation workshop
Artists and creative industries professionals—Who use the space for the production of cultural contents	Create new cultural contents	Creativity; social engagement; cultural production; personal growth	Interviews Participant observations
Local community—Residents in the neighbourhoods that attend activities and events in EXATR	Increase access to cultural and social resources	Social inclusion; mutuality; personal growth	Participant observations
Cultural associations—That use the space for events	Gain access to the space	Creativity; personal growth; (partial) collaboration	—
Civil society organisations—Local formal and non-formal groups of citizens and students that use the space of EXATR	Gain access to the space	Participation; personal growth; social cohesion	—

At first, we conducted a series of 12 semi-structured interviews to explore the case and its characteristics (Yin, 2014). To ease the conversation, we let interviewees set their own narrative about the implementation of temporary uses. Then we followed with questions to explore the determinants that influenced decision-making in the re-use process (Yin, 2014). The diversity of stakeholders involved allowed us to customise interviews in a way that each informant only answered questions related to their direct experience (Leavy, 2017). In parallel, we analysed documents produced by the stakeholders involved in temporary uses—including reports, festival brochures, and other dissemination material—to better understand the typologies of activities implemented and the profile of participants (Leavy, 2017). Lastly, we decided to conduct a series of participant observations before and during festivals to understand whether some learnings of the temporary uses are still present in the management of EXATR (O'Reilly, 2012). This

allowed us to explore the legacy of temporary uses by observing how it is integrated in the design and implementation of festivals, while giving us the opportunity to speak with users (O'Reilly, 2012).

To perform our thematic analysis, we first coded the interviews according to determinants that influenced the temporary uses and those that contributed to generating outcomes for participants and non-participants (Gioia, 2021). As a second step, we clustered different determinants according to four categories used to build the analytical framework (Gioia, 2021): context, i.e., the given determinants offered by the context of intervention, such as regulatory frameworks and municipal practices; resources detained by the stakeholders that they share and deploy in the process; collaborative mechanisms among the different stakeholders involved; and values that are co-created through temporary uses. By triangulating these data with the information collected through document analysis and observations, we formulated a preliminary understanding of the conditions under which temporary uses are managed at the local level and leave a legacy. Later on, we presented our understanding of the case to the stakeholders that participated in the research, and, through a workshop, we collaboratively refined it (Leavy, 2017).

Based on the co-construction of theories, we formulated an analytical framework by clustering the different conditions according to the four categories presented above. We first described the characteristics of the case and how the different determinants acted in this specific case. Then, we developed potential alternative scenarios for each context, resource, and mechanism factors to understand if they lead to similar or alternative outcomes contributing to the co-production of values through temporary uses. These alternative scenarios that could lead to the generation of shared values through temporary uses have been included in the analytical framework, establishing causal connections between the different determinants and the values, providing guidance on how to operationalise it. Lastly, we defined a proxy for each value identified to be used as an indicator to verify whether a change occurred or not in the context.

5. Findings

EXATR presents an interesting approach towards temporary uses, allowing local stakeholders to re-discover a crucial infrastructure while contributing to pass its property from the original private owner to the municipality of Forlì. This activated a participatory valorisation process of the former depot, allowing the engagement of local associations and civil society in the co-production of activities and services. As such, EXATR can be considered a demonstrator of how culture-based processes can mitigate gentrification and displacement issues. Temporary uses allowed SI and CdE to assess the local needs and to propose experimental solutions to bridge the policy gaps. In doing so, EXATR gave back a fundamental infrastructure to the city while offering a new common space to the neighbourhood. Furthermore, it offers the space and a network to local artists that gained access to resources to create new products outside of the mainstream culture market. All this was possible due to the recurrence of three collaborative mechanisms that activated latent resources and contributed to the creation and sharing of values through temporary uses in line with the general interest.

The first collaborative mechanism that we observed is the co-production of social and cultural activities. Co-production stands at the core of the relationship between SI and CdE, which, as acknowledged in the interviews, created a space for collaboration based on mutuality and trust, enabled by the social and relational capital of the two organisations, where they identified a shared intentionality and a common purpose, moving beyond individual agency (Bollier & Helfrich, 2019; Harvey, 2012). In particular, the two

organisations promoted a re-use idea that went beyond the short-term horizon of the temporary use agreement. As reported during the interviews, they believed that temporary uses were necessary to promote a discussion about the preservation of the depot. In this process, they largely engage residents, civil society organisations, artists, and former ATR employees to re-discover and preserve the history of the depot, and to co-design new functions in response to local needs. As such, the temporary use agreement provided a framework to activate a community process for the re-use of an urban immovable asset, by increasing the relational value that the local community attach to it (Kip & Oevermann, 2022). The approach to co-production is also part of the legacy of the temporary uses, and it is still present in EXATR. In fact, festivals and cultural activities in EXATR are co-created by SI and CdE with other local cultural associations and civil society organisations, as observed throughout the research. The same holds true when dealing with social and cultural welfare services provided through EXATR that, as reported by SI, are co-created with civil society organisations and residents.

Secondly, the collaboration is based on the capacity of participating stakeholders to negotiate and adapt the purpose of their intervention according to evolving local needs and the general interest. In this case, proximity and the entrepreneurial mindset of both associations reinforced the mutual objectives and acted as an aggregator, as reported in the interviews, through a common purpose beyond the scope of individual objectives. This led to a progressive sharing of knowledge and practices in the design and management of the activities, as reported by members of the two associations, making the collaboration fundamental to ensure place identity (Bollier & Helfrich, 2019). Furthermore, both SI and CdE recognise that their relationship was strengthened by the fact that, in the absence of a political response to the abandonment of the depot and the degradation of the surrounding neighbourhood, collaborating was far more effective than competing for resources. This presents the case for a shared purpose that acts as a compass to promote the general interest through private-led activities, limiting the possibilities of vested interests taking over the values created through collective agency.

The third collaborative mechanism is based on the capacity to pre-distribute resources and values at the local level. According to SI and CdE, this reinforced their mutually agreed purpose and motivated them in the collaboration. The desire to give back to the community the abandoned depot and transform it into a place of cultural production and social innovation lay at the core of the temporary use agreement, as reported by SI. In this specific case, the activation of this mechanism, together with the associations' capacity to self-fund the activities, allowed them not to be co-opted by the owner of the building nor by the municipality, but it created an alternative means to valorise the abandoned bus depot (Bollier & Helfrich, 2019). This can be confirmed by the investment made by the municipality to legitimise the intervention in EXATR. As reported by a former municipal employee, the decision to support the initiative was based on the capacity of EXATR to co-create values for the local community, making the depot worth of being preserved from market-based exploitation and privatisation. The municipality recognises that "they [SI and CdE] offered us a vision and a platform to co-create a project for the entire neighbourhood," leading to the decision to foster this initiative.

The combination of these three mechanisms contributed to increasing the liminality of the space, promoting the recognition of the former ATR depot as a common space (Stavrides, 2015). The public ownership of the building allows access to the building to all interested parties, while the cultural and social activities implemented in EXATR increased its rivalry, requiring participants to organise themselves to use it. Furthermore, this process contributed to the co-production of social values that are shared by

the participating organisations, artists, the local communities, and the municipality. In the words of a CdE representative:

> It was through hard work and demonstration [within the temporary use agreement] that we were already making a difference. We engaged the municipality in a dialogue that led to the development of a joint project for the preservation of the bus depot based on a tandem of cultural production and participatory urban regeneration. It was not easy, as this required a direct investment from us [SI and CdE].

This provides a hint that temporary uses can leave a legacy when valorised through shared governance models and the implementation of long-term public projects pursuing the general interest. In the case of EXATR, the values co-created through temporary uses are shared among the local community, who recognised how they felt empowered thanks to the engagement in the co-production of social and cultural activities, increasing the quality of life of residents, while fostering participation in economic, civic, and cultural life, as reported during the observations. All this contributed to the recognition of the depot as a community asset, as reported by CdE. Lastly, artists and creative professionals recognised that the temporary uses gave a unique opportunity to experiment with new forms of site-specific and participatory production, as reported in the interviews. The observations during the festivals confirmed the existence of this legacy of the temporary uses by offering opportunities to co-create with like-minded artists, cultural professionals, and the local community, and to present their art in an innovative and emancipated way, disentangled from the market.

The context in which the intervention took place is also highly relevant. EXATR is located in a low-income neighbourhood at the hinge between the historical centre and an area of recent regeneration. The scarcity of community spaces, the abundance of abandoned buildings, and the lack of resources for their re-use motivated the collaboration, as reported by SI. These elements influenced the way in which SI and CdE understood their mission and purpose in the temporary uses and how they used them as a platform to engage the local communities (Kip & Oevermann, 2022). In this light, temporary uses promoted a critical reflection about the legacy of the former ATR depot and how to interpret it as a resource for urban regeneration (Kip & Oevermann, 2022). Moreover, as reported by SI and CdE, at the time of the intervention, political response to localised socio-economic challenges was limited due to the municipality's involvement in other flagship projects. This presents an interesting case in which temporary uses can be used in a subsidiary way in the void left by the local government, without being co-opted by real estate actors (Madanipour, 2018). Lastly, the ownership of the building by ATR acted as an enabling factor for the two organisations to use the depot as a resource for the creation of social and cultural services. This, as presented above, was also fundamental in passing the property from the company to the municipality.

Based on the findings, we identified three main pathways that allowed temporary uses in EXATR to enable the creation of a common space while leaving a territorial legacy. These pathways were first hypothesised by the research team and then discussed with the involved stakeholders. The pathways are context-specific and enabled by a mix of resources needed to activate the three collaborative mechanisms towards the generation of social values. They can be synthesised as follows:

- In contexts characterised by scarcity of resources, the social capital of participants in temporary uses can promote the activation of social and cultural co-production patterns towards innovation and sharing of

practices. This increases personal knowledge and skills and the capacity of temporary uses to promote access to social and cultural resources.

- In contexts with an abundancy of abandoned buildings and characterised by a limited political capacity to provide solutions, a pro-social intentionality and the entrepreneurial mindset of participants in temporary uses allows the promotion of a discussion about the purpose of the practice and the place, engaging communities to recognise the cultural and heritage value of places. This can generate a collective sense of agency to preserve practices and spaces beyond the timeline of temporary uses, while empowering local communities and increasing a sense of belonging and solidarity.
- In contexts of political inactivity, engaged civil society can contribute to the general interest through co-created and self-funded initiatives, transforming the common purpose into a pre-distribution mechanism to avoid co-option from external actors, while contributing to the legitimisation of the practice and to the sharing of knowledge and practices within the neighbourhood in which the building object of intervention is located. As part of the pre-distribution mechanism, temporary uses must be able to foster public or hybrid ownership of the space in which practices take place.

6. The Case for an Analytical Framework

The activation of the three pathways found in EXATR helps to address the liminality of temporary uses, allowing for better exploration of their role in creating common spaces. To operationalise the pathways, we developed an interpretative framework connecting empirical evidence from the study with the main determinants included in the framework. The analytical framework aims to provide guidance on interpreting the capacity of temporary uses to generate a legacy and to produce positive social values beyond their lifespan.

The framework can be applied following three steps. At first, an assessment of the consistency of the context conditions must be carried out. Secondly, collaborative mechanisms and the relevant resources connected to each of them can be assessed to understand how participants in temporary uses interact with each other and use the space. Lastly, value dimensions can be analysed according to the proxies provided. The analysis can be conducted through interviews or focus groups with participants. When all three agency pathways are correctly assessed, the case is expected to follow a similar pattern to EXATR. If one or more of the pathways are not verified, an evaluation of the external or internal factors that hindered results must be conducted to assess differences with the proposed agency pathways. Table 2 offers an operational interpretation of the analytical framework.

Table 2. Proposal for an analytical framework—operational guidance according to the three pathways.

Agency pathway 1. Co-production in temporary uses	
Context	*Resources*
C1. Scarcity of resources for cultural and social practices—limited public or philanthropic funding for cultural and social activities.	R1. Social capital of participants—individuals or organisations participating in temporary uses have a high social capital (i.e., widespread network).
Mechanisms	
M1. Social and cultural co-production—presence of social and cultural co-production activities within the scope scope of temporary uses.	

Table 2. (Cont.) Proposal for an analytical framework—operational guidance according to the three pathways.

Values co-created by temporary uses	*Proxies*
V1. Personal growth—knowledge and skills acquisition	Increased capacities to collaborate with other stakeholders and to organise local networks
V2. Access to social and cultural resources	Stakeholders can access the building, participate in, and contribute to activities
V3. Shared knowledge and practices	Stakeholders recognise mutual sharing of social and cultural participation practices
V4. Innovation in cultural production and social welfare services	New social and cultural welfare products are co-produced by participants in temporary uses
Agency pathway 2. Temporary uses as a heritage-making device	
Context	*Resources*
C2. Abundancy of abandoned buildings—presence of abandoned buildings with historical or symbolic value in the neighbourhood object of intervention.	R2. Entrepreneurial mindset—stakeholders involved are able to transform challenges into opportunities by offering responses to socio-economic needs.
C3. Political inactivity vs Municipal activism—two alternative conditions: contexts with no political promotion of community-based responses to socio-economic challenges, without aversion against grassroots initiatives; or contexts in which the municipality adopts a policy for collaboration with civil society in the care of spaces and provision of services.	R3. Interest in the space to provide pro-social or cultural activities (intentionality)—stakeholders recognise a pro-social intentionality in taking part in temporary uses.
Mechanisms	
M2. Negotiation of a purpose of temporary uses—involved stakeholders agree to a common purpose greater than individual objectives and envision a future beyond the time horizon of temporary uses.	
Values co-created by temporary uses	*Proxies*
V5. Collective agency	Stakeholders recognise an increased capacity to act as a network
V6. Solidarity	Presence of a mutuality network among participating stakeholders
V7. Empowerment	Stakeholders perceive they have more resources to participate in decision-making processes
V8. Cultural and heritage value of the building in relation to stakeholder expectations	Stakeholders attribute a cultural value to the building object of temporary uses
V9. Sense of community	Mutual recognition of values among stakeholders participating in temporary uses
Agency pathway 3. Pre-distribution through temporary uses	
Context	*Resources*
C3. Political inactivity vs Municipal activism—see above. C4. Engaged civil society—knowledge and connection with the context of intervention.	R4. Capacity to self-fund activities—participants in temporary uses have access to economic resources for the production of social and cultural activities, through fund-raising campaigns or the capacity to attract external funding (e.g., competitive bids).

Table 2. (Cont.) Proposal for an analytical framework—operational guidance according to the three pathways.

Mechanisms	
M3. Pre-distribution—participants in temporary uses are aware of how to anticipate sharing the outcomes and values created and agree to a model of distribution of benefits.	
Values co-created by temporary uses	*Proxies*
V3. Shared knowledge and practices	See above
V10. Localisation value	Temporary uses contribute to the generation of societal outcomes where they are more needed (e.g., marginal neighbourhood)
V11. Legitimisation of practices	Participants in temporary uses act according to the general interest of the community
V12. Public or hybrid ownership of the building	The building object of temporary uses is acquired by the municipality or by the community through a hybrid ownership model

7. Discussion and Conclusion

Our research promoted an in-depth case study of the conditions that enable common spaces through temporary uses, contributing to the academic discourse on their legacy. EXATR offered a significant case in this regard, leveraging on proximity and mutuality to increase the liminality of urban spaces (Stavrides, 2015), and empowering the civil society to co-produce activities and to co-manage a reclaimed urban asset (Bollier & Helfrich, 2019; Madanipour, 2018). As shown, in EXATR, temporary uses increased the capacity of participants to act collaboratively (Bollier & Helfrich, 2019; McArdle, 2020).

In this specific case, the temporality of the intervention in the initial phase promoted a discussion about how to re-use abandoned spaces and for whom to valorise them. This happened at the conjunction of three agency paths presented in Section 5. These agency paths have been built on the findings from EXATR, but they are not specific to it. In fact, they could be verified in other cases dealing with temporary uses. This confirms the idea of temporary uses as an enabler of collaboration among stakeholders with similar interests (Bollier & Helfrich, 2019), but it also points out the conditions needed for temporary uses to generate value for communities (Madanipour, 2018). This effect is more profound in cases in which stakeholders approach temporary uses with an entrepreneurial mindset—being able to create economic opportunities and not simply seeking funding (Chang & Gerrits, 2022)—and they present an interest in the space that is capable of conjugating social and cultural objectives. The activation of these collaborative mechanisms is conditioned by the resources available to the participating stakeholders that can increase or hinder the quality of collaboration, as well as by contextual factors. Among them, as we presented, the legal and the political ones are the ones that have a stronger influence on the way in which stakeholders collaborate and on how they negotiate the purpose to contribute to the general interest.

Thanks to the activation of the three mechanisms, temporary uses can find their identity and create a legacy at the neighbourhood level, without the risk of value capture (Madanipour, 2018). The combination of the three agency pathways allowed to reclaim the former ATR depot and to defend the spirit of the intervention from market exploitation (Chang & Gerrits, 2022; Martin et al., 2020). Additionally, this case showed the potential of temporary uses to engage communities in the recognition and attribution of heritage value to urban assets,

paving the way for their valorisation and co-management according to the social value generated for the community (Kip & Oevermann, 2022). EXATR hinted that temporary uses can bring together different kinds of users in co-production activities to satisfy local social needs, while enhancing access to cultural resources.

Building on the findings of our research, we proposed an evaluation framework to guide the interpretation of temporary uses and understand whether the same results achieved by EXATR are present in other contexts where similar mechanisms are activated by participating stakeholders. Our analytical framework can increase the quality of the analysis on temporary uses, allowing understanding of how to adapt collaborative practices to specific context characteristics and resources available to participating stakeholders, while also facilitating the identification of the values and outcomes that are co-created through temporary uses. In this light, the analytical framework acts as a compass to navigate dilemmas related to the activation of temporary uses, anticipating questions related to their long-term effects.

Our research is not free from limitations. Being based on a single case study limits the generalisation of results to contexts with different political, social, or economic conditions. The findings of the case study have been integrated into the analytical framework that can be applied to different temporary use practices presenting similar context-specific characteristics to assess their capacity to lead to the same outcomes. This can validate our understanding and expand the determinants to be considered in each agency pathway. Furthermore, relying on interviews and community narratives may overemphasise the positive aspects of collaboration, while underrepresenting the challenges that stakeholders might have faced. We tried to limit this second concern by giving a voice to stakeholders with different characteristics as described above.

Building on these considerations, we suggest conducting comparative studies across different cities and governance models to reinforce the formulation of the proposed analytical framework. This can help in identifying regularities and differences across different contexts. To conclude, our analytical framework has the potential to develop as a practice guideline, by integrating recommendations for practitioners, and as an evaluation approach by integrating clear and measurable indicators to assess the impact of temporary uses and their sustainability in space and time.

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Conflict of Interests

The authors declare no conflict of interests.

Data Availability

Data are available upon request.

LLMs Disclosure

Copilot was used to conduct a first thematic screening as part of the analysis.

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ARTICLE

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STAR (Sustainable Temporary Adaptive Reuse) Toolkit: Innovation for Value Creation in Commercial Property

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Abstract

The Covid pandemic has affected society in many ways. In the built environment, it has impacted how buildings are used and by whom. These changes have affected market behaviours as owners look to reposition assets and meet altered demand paradigms. Changes to work praxis following Covid, particularly working from home (WFH), have affected commercial office values in central business district (CBD) markets. This has resulted from companies needing less space and taking advantage of discounts on higher-quality office space. With incentives increasing and rental growth stagnating due to decreased demand, particularly in lower-grade assets, capital values have declined, and the investment market has slowed. In response to these shifts, efforts to rejuvenate the commercial property sector in Australia include the development of the Sustainable Temporary Adaptive Reuse (STAR) toolkit. The STAR toolkit developed a series of resources that enable owners to assess the short-term reuse potential of an asset. The aim of the toolkit is to reduce vacancy and drive uplifts in rental income, through temporary adaptive reuse. This article demonstrates the capacity of the STAR toolkit to help reposition an asset by sustainably reusing some, or all, of the vacant space. The approach provides a strategy for owners to improve usage and rejuvenate assets, creating value uplifts and income stream security in challenging market conditions.

Keywords

adaptive reuse; central business district; Covid; vacancy rates

1. Introduction

The Covid pandemic began in Wuhan, China, in December 2019. Soon after, it spread through Asia and globally by early 2020. The World Health Organisation (WHO) declared the outbreak a public health

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emergency of international concern (PHEIC) on 30th January 2020 and assessed the outbreak as a pandemic on 11th March 2020 (Ghebreyesus, 2020). Many countries, including Australia, went into lockdown, whereby people remained at home. In late 2021, Australian state borders started reopening, and by September 2022, Australia ended daily reporting of Covid cases. On the 5th of May 2023, the WHO downgraded Covid from being a global health emergency.

Due to advances in technology, office employees could work from home during the lockdown, many preferring this way of working. Businesses continued functioning and, when employers asked staff to return to the office, this was met with resistance. A compromise was reached for many, with a hybrid of working from home (WFH) and the office. This reduced traffic in the central business districts (CBDs) of Australian capital cities has impacted demand for office space and supporting retail spaces. CBDs, commonly referred to as downtown, are known to be the epicentre of economic and professional life, characterised by the concentration of business headquarters, retail, food and beverage, and transportation infrastructure (Murphy, 2017).

Questions have arisen around what alternatives there are to promote innovation and new uses in existing commercial property, and how we can measure the value created. The value of an asset is primarily expressed monetarily (Morri & Benedetto, 2019). Value can be defined from the customer's point of view as well as the company's (Lackéus, 2018). In this research, the intention is to understand how temporary adaptive reuse can add value through increased income to property owners and value creation through improved utilisation.

This article explores the changing demand for office buildings in Australian state capitals, pre- and post-Covid, focused on B & C grade stock. The article reviews the Sustainable Temporary Adaptive Reuse (STAR) Toolkit Project, funded by the City of Sydney from 2022 to 2024. This research encompasses Melbourne and Brisbane to allow for comparative analysis. The STAR toolkit, through a series of workshops, co-developed seven tools with industry and community stakeholders. The project aimed to develop resources to support sustainable temporary reuse of underused and vacant buildings. The tools developed and analysed in this article are the first six tools (see Table 2; Tool 7 is a video suite and thus excluded). This is a qualitative research undertaking, comprising thematic analysis to identify patterns of value creation through review of each of the tools in the toolkit.

2. Covid, Changing Dynamics, and the STAR Toolkit

Demand for property, particularly commercial office, is shifting post-Covid. This is impacting value, tenancy covenants, usage patterns, and market performance (Gupta et al., 2022). These changes affect owners, developers, and occupiers. Changing demand profiles are increasing the level of portfolio risk that can impact the retirement savings of Australians who are invested in commercial assets through their superannuation (Robertson, 2020).

The rigidity of the commercial office model was highlighted during, and following, Covid. Deficiencies include little flexibility to adapt stock to new demand profiles and an inability to offer responsive layouts and changed space formats sought by tenants (Barath & Schmidt, 2022). This was highlighted in Australia by low sub-lease vacancy in state capitals post-Covid (Property Council of Australia, 2025). Covid revealed weaknesses in the economy and in the built environment, particularly office markets. Gaps in knowledge became evident; managers and owners lacked the capacity for quick, adaptive responses to rapid change in

the office work dynamic (Hou et al., 2021). The office sector has faced headwinds, typified by low rental growth and high vacancies since (Harley, 2025).

Changed commercial property use impacts CBDs, both directly and indirectly. Fiorentino (2024) asserts that the Covid "crisis" caused "long-term structural, socioeconomic and political shifts" that are impacting the way we live and work in cities. As work preferences and modalities change, the use of office-adjacent retail, particularly food retail, is shifting, and large swathes of CBD areas have become more, or less, popular, particularly during office hours. Certain areas are much less frequented, as certain days become favourable for WFH (Australian Institute of Health and Welfare, 2024).

Covid impacts are wide-ranging in CBD areas with multiple property classes interacting, affecting structure, footfall and traffic flows, resident population behaviours, and consumption patterns (Hermann et al., 2021). So far, councils have used retailing as a tool to rejuvenate CBDs; however, we believe that the adoption of short-term tenancies and the application of the STAR toolkit could enable unutilised or underutilised office space to play a larger role in the rejuvenation and adaptation of CBD areas to a "new normal" (McKinsey, 2023). This article explains how the STAR toolkit can be applied directly to a building and can have a broader positive impact.

As we move into a new era of property usage, illustrated by the decline of the office-working model and an increase in WFH, and flexible working arrangements proliferating post-Covid (Vij et al., 2025), the momentum to adjust how commercial property, particularly offices, are used, is growing. The need to optimize assets must drive more and better adaptive reuse approaches (Oladiran et al., 2023). As many office buildings are now less populated with workers, and staff are fulfilling their roles more efficiently with a lesser space requirement (Fox, 2023), there is capacity to deliver benefit to multiple stakeholders if office space that is underutilised is adaptively reused.

Building owners can capitalize on shifting work models and differing staffing arrangements influencing changing property uses, which can lead to more productive and efficient use of assets long term (Parker, 2020). Increasingly, sustainability is a major tenet for building owners and occupiers, and a "reuse" approach is preferred to a "re-develop" one, as this aligns with important environmental, social, and governance (ESG) imperatives (Ramírez Pacheco et al., 2020). Stakeholders can benefit from adaptive reuse assessment tools with respect to practical knowledge gain and how this approach can dovetail with sustainability in a sector increasingly aligned with corporate social responsibility (CSR), and looking for ways to meet these objectives (Škare & Golja, 2013).

3. The Evolving Market in Brisbane, Melbourne, and Sydney

Tracking Australia's commercial office market over the last decade shows peaks and troughs; from 2015 to 2025, the market was most severely impacted by Covid in 2020–2021 (Bessant & Watts, 2021); however, following the initial shock of the pandemic, office markets have failed to recover (Lenaghan, 2024). Sustained, elevated vacancy figures feature most Australian CBD office markets. Data found in industry reports, such as Colliers' *Quarterly Asset Class Snapshots Q2 2025* (Henderson et al., 2025), provide metrics including net absorption and rental growth. See Table 1 for key metrics.

Table 1. Office market indicators—Sydney, Melbourne, and Brisbane (2019 & 2025).

Location and Grade	Net absorption (annual, sqm)		Net additions (annual, sqm)		Average gross face rent ($AUD)		Average incentive (%)		Yield	
	2019	2025 (Aug)	2019	2025 (Aug)	2019	2025 (Aug)	2019	2025 (Aug)	2019	2025 (Aug)
SYD Prime	33,446	99,704	−20,101	−12,587	1,326	1,546	17.5	36.2	4.62	6.03
SYD Sec	42,890	−43,172	−44,326	−59,937	962	1,145	19.5	35.3	5.25	7.19
MELB Prime	108,422	−64,031	−20,101	−42,330	680	718*	17.5	47	4.77	6.58
MELB Sec	−25,110	3,634	−44,326	−16,412	591	538*	19.5	47.9	5.55	7.46
BNE Prime	20,507	30,467	0	0	771	1,104	35.5	38.5	5.5	7.25
BNE Sec	13,632	−16,561	−31,723	−23,810	610	775	38.3	39.5	6	8.5

Notes: Sec = Secondary; * net face.

Continuing from a recovery in the early 2010s, after the global financial crisis, Australia's commercial office market showed momentum. As per Figure 1, rents across grades showed growth; by 2015, east coast capital city office vacancy rates were low (Brisbane 15.6%, Sydney 7.4%, and Melbourne 7.7%; Knight Frank, 2025a, 2025b). Yields at the end of 2015 were generally sub 6% (prime), a figure indicative of a strongly performing asset class. Interestingly, at that time, Melbourne's quoted yield range was 4.75–6.50%, while Sydney was

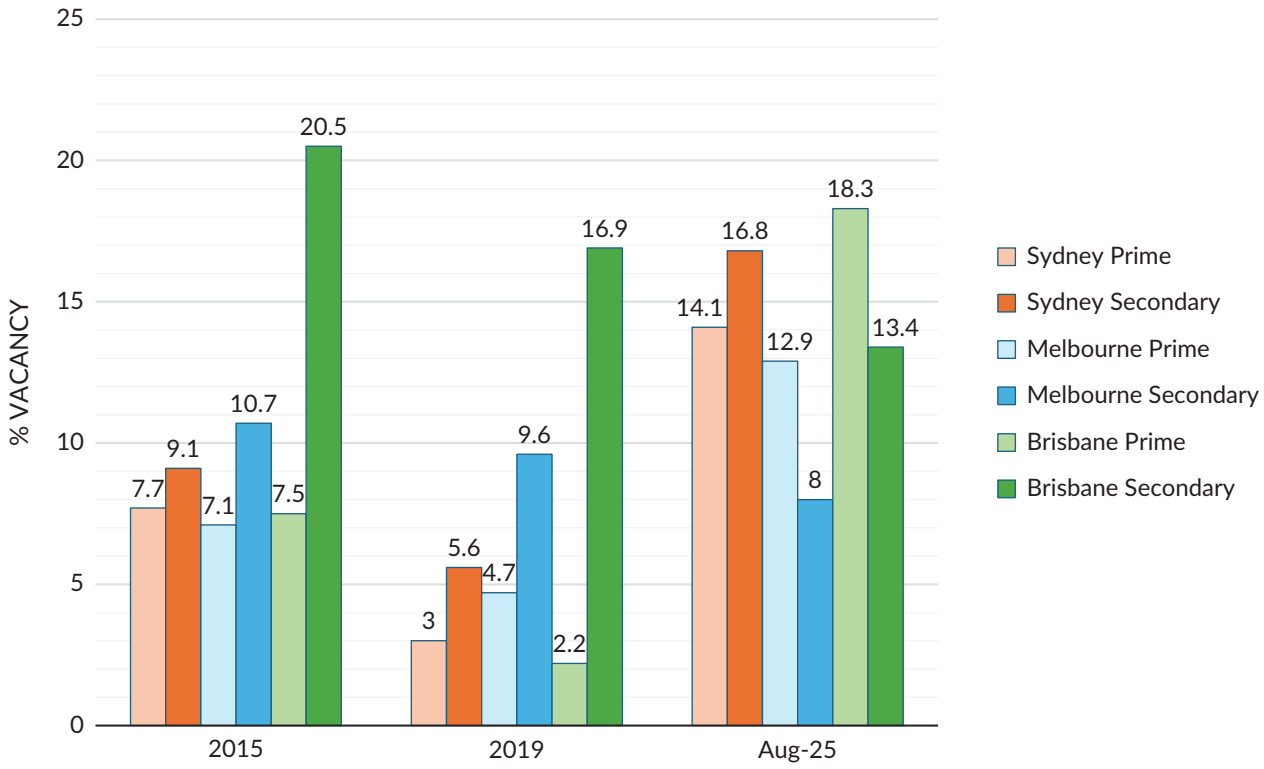


Figure 1. Prime and secondary commercial office vacancy over time—2015, 2019, and 2025. Sources: Knight Frank (2019a, 2019b, 2025a, 2025b).

5.50–6.75%, positioning Melbourne as the nation's best-performing office investment market, a position that has changed now (Kwan, 2024). From 2016 onward, the office markets of Brisbane (and Perth) were significantly underpinned by resource-sector growth and marked by construction commencements, high demand, and low supply (Property Council of Australia, 2025). The growth of the mining sector strengthened the office sector nationally, and economic strength could be attributed to the mining sector as positivity reverberated through the economy (Weldegiorgis et al., 2024).

Another key performance metric—supply—ballooned as new stock under construction and nearing completion came to market when demand was subdued. The Property Council of Australia notes that Melbourne has the largest pipeline nationally, with over 300,000 sqm coming online between 2025 and 2027 (Property Council of Australia, 2025), which will further exacerbate vacancy. Melbourne presents the most notable change from pre-Covid to post-Covid. The increase in the vacancy rates across both prime and secondary markets, the blow-out of incentives to be sitting at what is 50% in both markets, and clear softening in yields, particularly prime, shows the significance of the issues. As various metrics indicate, the Melbourne market was most heavily impacted and is widely considered a "basket case" (Lenaghan, 2024). The most recent data for Melbourne office space showed that prime vacancy has moved from 12.4% to 20% (Henderson et al., 2025). The Prime incentive at this time was 41%; this is now 47%, indicating the worsening situation in the market, even in quality, typically "safe" assets. This clearly indicates the applicability of the STAR toolkit outside of its formative market, Sydney.

The dynamics of Australian cities have changed, resulting in impacts on workers, visitors, and residents. By adaptively reusing a single asset and optimising available space, the benefit of STAR principals extends beyond just increasing worker and visitor populations; there is the real possibility to combat negative socioeconomic impacts that the weakened office market has caused (Maginn & Mortimer, 2020). An adaptively reused asset can revitalise an area, increase leasing demand or retail tenancy occupancy, and, in turn, drive footfall uplifts and "attractiveness" of an area for all city users (Fieger et al., 2023).

4. The STAR Concept and Value Creation

The STAR toolkit was a research project in response to the vacancy rates in commercial buildings post-Covid, in the Sydney CBD. As the interest in WFH grew, so too did the underutilisation of the offices and facilities in the CBD (Hensher et al., 2023). The toolkit was developed to address the sustainable temporary use of buildings to bring people back into the CBD, and to identify and discuss opportunities for doing this.

The stakeholders engaged throughout the process included industry experts, property owners, property designers, tenancy market specialists, experts in building codes and compliance, and council representatives, alongside the research team with their backgrounds in urban planning, building surveying, financial and asset management, and architectural science (Armstrong et al., 2024). To identify positive impacts that adaptive reuse provides, the social, environmental, and economic benefits were considered when identifying the different tools in the STAR toolkit (Armstrong et al., 2023), and stakeholders were asked to focus on the key social, economic, and environmental issues that needed to be addressed.

By opening commercial office buildings to even partial adaptive reuse, there is capacity to rejuvenate and reimagine CBD areas as they struggle to respond to new retail, visitor, and worker occupancy patterns

post-Covid (Connell-Variy & Wilkinson, 2026). WFH rights have recently been introduced as legislation in Victoria's parliament (Willingham, 2025), suggesting that a return to pre-Covid workforce patterns can be ruled out, and the need for adaptive reuse consideration will become more common. An appropriate adaptive reuse approach to a building can have positive impacts on CBD areas or quadrants, increasing footfall, outside hours activation, and community facility inclusion, leading to increased community development and engagement (Lundgren, 2023).

The aim of the STAR toolkit was to identify: (a) positive social outcomes, such as social inclusion, community development, and innovative response; (b) positive impacts that not only add value economically but also environmentally; and (c) productive and efficient asset use of assets by capitalizing on the new working model (Wilkinson & Remøy, 2017).

Covid impacted the social structures of cities and reinforced the influence commercial property has in shaping cities and the communities therein (Futcher et al., 2017). As CBDs evolve in line with changing work models and new usage patterns of CBDs (Perez et al., 2022), there are myriad opportunities for owners to optimize their assets through adaptive reuse, thereby increasing tenancy levels and demand from space users (Bullen & Love, 2011). And while relationships are continuing to emerge, there is evidence to suggest Covid created a snowball effect, both within the office sector and within CBDs generally—as workers went remote, working patterns changed and certain days became favoured (Visontay, 2023).

The retail sector had to respond and adapt quickly as restrictions on movement disrupted traditional consumption patterns and this impacted this market sector (Fieger et al., 2023). At the same time, tourism stopped, and CBD residential populations contracted considerably. McKinsey (2023) highlighted that many became "untethered" from their daily commute and moved away from the urban core. As both metrics bounce back, they are changing in makeup, and the built environment must recognize changes and contribute to the next evolution of the modern CBD (Vigiola et al., 2022).

4.1. Foundations and Theoretical Framework

Sustainability in property has increasingly been seen positively, beginning with its introduction in a policy context in the 1987 Brundtland report (Kuhlman & Farrington, 2010), and followed by the Rio Declaration on Environment and Development, signed at the 1992 Earth Summit (Isa et al., 2014). As early as 1994, issues around transforming concept development into policy emerged (Owens, 1994). While the evolution of sustainability in property has been slow, the new century spurred growth in research (Cerin & Karlson, 2002), activity in the industry increased, development of sustainable built form became more common, and knowledge increased through rating tool development (Reed et al., 2009).

The increase in adaptive reuse and retrofit practices has run concurrently with increasing research and adoption of sustainability within the property sector (Menassa, 2011). As research and practice in the industry accelerated, ratings tools became more widely understood and utilised (Gasparatos & Scolobig, 2012), the prominence of sustainability increased, and metrics developed (Ortiz et al., 2009), which investigated the "democratic allocation" of resources and how this added to built form sustainability, further supporting the uptake of "re-use" (Yılmaz & Bakış, 2015). Williams and Dair (2007) explored barriers to adoption of sustainable approaches, including the "lack of consideration of sustainable approaches,"

highlighting the continuing need to overcome early-stage hurdles through increases in sustainability education to stakeholders as a way of increasing adaptive reuse best practice adoption (Wang, 2009).

More recent research in the field focusing on reuse and refit has solidified theory and advanced knowledge considerably, larger reuse projects show scale is possible (Wan et al., 2022), a re-focus to user satisfaction occurred looking at more complete sustainable practices and outcomes for all stakeholders (Kwon et al., 2019), smart technology integration is increasingly explored (Azouz & Elariane, 2023), and net-zero objectives in reuse are pioneered (Luo, 2022). Together, we see an evolutionary development occurring in both the theoretical underpinning of what adaptive reuse and retrofitting means and a shift in analysis, assessment, and application of the practical.

This research contributes by extending knowledge around sustainability in commercial property, post-2020. Specifically, the application of sustainable practices and development of education and analysis tools to proliferate adoption, which Häkkinen and Belloni (2011) identified as key. It does this through exploration of sustainable temporary adaptive reuse of commercial assets in the post-Covid environment, a new paradigm (Croom et al., 2020), thereby making the contribution to knowledge two-fold. We examine emergent and rapidly changing economic conditions apparent in CBDs post-Covid, typified by increased WFH modalities, smaller spaces leased, and changing office type preferences, which contribute to differing interactions from stakeholders with commercial assets (Balemi et al., 2021), and look at building reuse, optimisation, and increased sustainability performance through the lens of a new demand paradigm.

5. Research Methodology

This research adopted a qualitative method through thematic analysis, which looks at identifying patterns in a data set (Naeem et al., 2023). Qualitative research enables the researchers to gain a deeper understanding of issues under investigation; here, to firstly understand the potential for sustainable temporary adaptive reuse of commercial buildings as the market adjusted to the changes influenced by the Covid lockdowns; and secondly, by analysing each tool in the STAR toolkit to understand the potential value that can be created. Qualitative data were collected by thematically analysing the STAR toolkit, to identify patterns according to values that each tool created. These patterns were grouped into Social, Economic, and Environmental values, which were analysed against each of the tools to identify value creation. See Figure 2 for the methodology design.

To define the value created through the innovation of the toolkit, value creation mechanisms were reviewed through urban development and adjacent journals, and key value creation processes were identified. Eakin and Gladstone (2020) assert "to add value to analysis, researchers need to be able to 'penetrate' data and bring into view new possibilities for meaning and interpretation." To do this, we assessed the validity and reliability of the STAR tools by triangulating each tool to market data, leasing practices, and costs (Williamson, 1981), broader community needs in CBDs (Putnam, 2001), adaptive reuse opportunities (Bullen & Love, 2011), and optimising resource allocation in respect of social, economic, and environmental criterion (Deng et al., 2024).

Reliability and validity are important characteristics of qualitative research; they add rigour and are necessary for replication of the research design, as Franklin and Ballan (2001) assert: "Consensus between two or more observers is necessary for establishing reliability in the study." To determine if other researchers would generate similar interpretations, two authors were present at the time of the workshops for the STAR toolkit, and two authors were not.

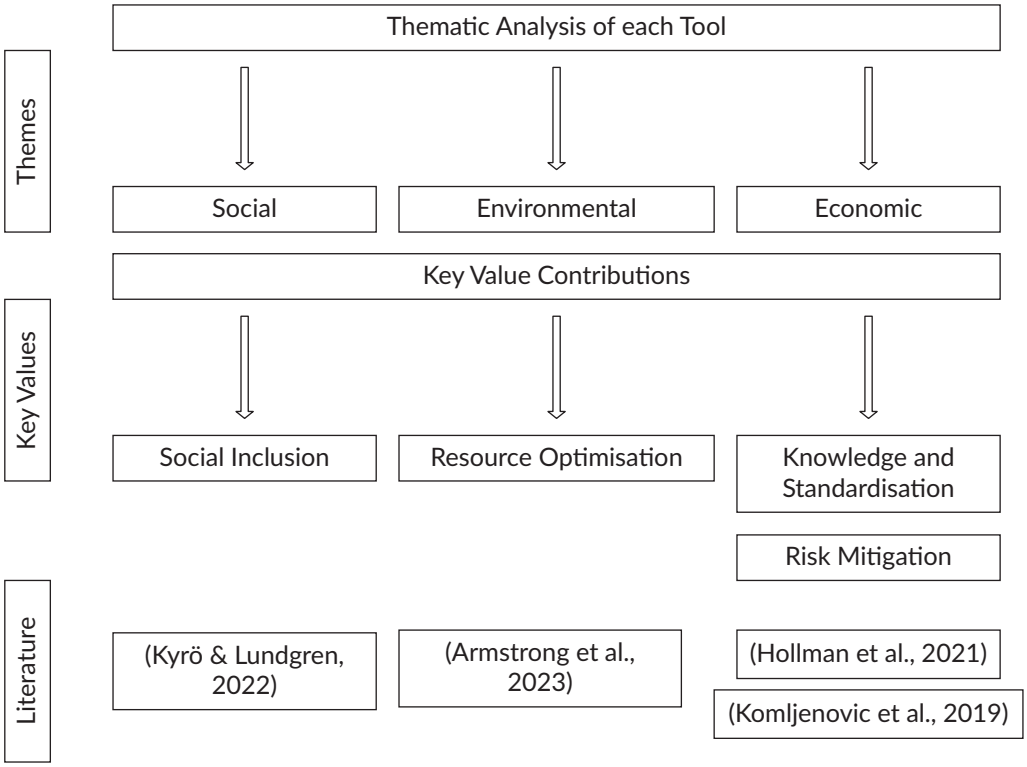


Figure 2. Methodology for thematic analysis.

Further detailed thematic analysis would be required for internal and external validity, to ensure the generated themes match the analysis performed in this research. The authors identify that this detail is lacking and notes the validity issues of this gap.

6. The STAR Toolkit and Value Creation Analysis

This section provides a comprehensive examination of the tools, using established theories of adaptive reuse, and the inhibiting factors defined by Hamida et al. (2026), to assess the contribution to value creation across environmental, social, and economic dimensions while addressing contemporary urban challenges.

6.1. Overview

Activating underoccupied buildings offers multiple advantages; using existing structures is highly sustainable, it retains embodied carbon, and reduces the risk of premature obsolescence (Aytac et al., 2016). Over time, underoccupied buildings tend to decay faster (Eliote et al., 2025); they fail to reveal maintenance issues, enabling cost-effective repairs (West et al., 2024). Additionally, underoccupancy can harm local businesses by decreasing foot traffic, which hampers the local economy (Longtin & Mitchell, 2021). Thus, the positive economic impacts extend beyond the building itself. This section presents value creation analysis for each of the six tools. The analysis is structured around three dimensions of value: social, environmental, and economic, using the inhibiting factors identified by Hamida et al. (2026). Table 2 provides an overview of the key value contributions across all six tools, with a summary of each value for each tool provided in Section 6.2.

Table 2. Summary of value analysis by tool.

Tool	Name	Social Value	Environmental Value	Economic Value
1	STAR Guide	Democratises urban planning knowledge; enables civic engagement	Frames temporary use as environmentally legitimate; reduces demolition pressure	Reduces information asymmetries; enables community access to affordable space
2	STAR Visions	Visual democracy; democratises participation; shapes planning education	Embeds sustainable design; extends circular economy to secondary building stock	Reduces design risk; prioritises social and environmental purpose over financial returns
3	STAR Matchmaking Resource	Expands community access to central space; advances spatial justice	Maximises building utilisation; reduces vacant building periods and demolition pressure	Reduces search costs; enables community organisations to access otherwise unaffordable space
4	STAR NCC Checklist	Ensures safety, accessibility, and universal design for all users	Integrates energy and sustainability standards; prevents resource waste from failed implementations	Reduces regulatory risk and uncertainty; enables early cost estimation
5	STAR SDG Mapping	Connects local action to global SDG commitments; supports participatory planning	Operationalises circular economy and climate commitments; links to Paris Agreement targets	Facilitates ESG reporting and access to sustainable finance mechanisms
6	STAR ESG Scorecard	Centres community benefit, equity, and well-being in property decisions	Integrates social and environmental sustainability assessment holistically	Redefines property value to include social and place-making outcomes beyond financial returns

Note: NCC = National Construction Code.

6.2. Tool 1: STAR Guide

The STAR Guide is the foundational tool, offering clear definitions and a contextual framework for later tools. Through a shared understanding among stakeholders, the tool standardises the STAR concept within existing commercial property frameworks.

6.2.1. Social Value: Democratising Urban Planning Knowledge

The STAR Guide addresses inequities in access to urban planning knowledge and processes and builds on social capital theory, which posits that transparent information and shared frameworks enable civic engagement by lowering participation thresholds. When communities understand what temporary adaptive reuse entails, how it relates to existing building classifications, and what temporal parameters apply, they can more effectively advocate for temporary uses serving community needs rather than solely property owner interests. Inclusive urban planning requires accessible knowledge enabling diverse stakeholders to engage meaningfully in decision-making processes.

6.2.2. Environmental Value: Operationalising Circular Economy Principles

Building reuse achieves 50–75% reductions in carbon emissions compared to demolition and new construction, as existing structures embody substantial energy investments. The Guide's explicit framing of temporary adaptation as "improving the building's overall longevity while minimising the environmental impact" shifts stakeholder thinking from binary occupied/demolished to recognising temporary use as environmentally valuable. By clarifying that temporary adaptation extends the building's utility without requiring a full permanent conversion, the Guide reduces pressure for premature demolition decisions. The Guide's environmental value lies not in direct carbon reduction but in creating conceptual space for temporary use as a legitimate environmental practice, potentially influencing building lifecycle decisions across the Sydney CBD and beyond.

6.2.3. Economic Value

The STAR Guide reduces information asymmetries that inhibit efficient market functioning. Property owners previously lacked frameworks for assessing temporary use feasibility, while potential users could not determine which spaces might accommodate their needs. However, from an urban planning perspective, economic efficiency serves as an enabler of social and environmental objectives rather than the primary goal. The economic value lies in making temporary use economically feasible for property owners, thereby maintaining their willingness to participate, while enabling community organisations and social enterprises to access centrally located space otherwise unaffordable in Sydney's high-rent CBD market. This dual function, reducing barriers for both property owners and community users, distinguishes the Guide from purely market-driven approaches.

6.3. Tool 2: STAR Visions

The STAR Visions tool provides design examples and visual representations that facilitate communication between decision-makers and designers. This tool bridges the gap between conceptual frameworks and practical implementation through case studies and design precedents. STAR Visions offers an innovative perspective for the STAR toolkit research project, as it aims to inspire decision-makers, including building owners, property advisors, and community stakeholders. Created by design students from the University of Technology Sydney and Washington State University in Australia and North America, respectively, the Visions focus on revitalising vacant office spaces with new functions.

6.3.1. Social Value: Visual Democracy and Community Engagement

STAR Visions addresses a critical challenge in planning: the difficulty non-specialists face in visualising alternative futures for existing buildings. As Sandercock (1998) argues, planning processes often privilege verbal and technical communication modes, disadvantaging community members lacking architectural training or professional planning experience. Visual tools democratize participation by enabling stakeholders to engage with spatial possibilities without requiring specialised knowledge. Collaborative design processes involving emerging architects from the University of Technology Sydney and Washington State University also advance planning education objectives. By challenging students to design social impact and environmental sustainability rather than maximum returns, the Visions cultivate professional values aligned

with collective urban welfare. This pedagogical dimension extends STAR's impact beyond immediate toolkit users, influencing future planning and design professionals' approaches to adaptive reuse.

6.3.2. Environmental Value: Materialising Sustainable Design Practices

Beyond the conceptual environmental benefits of building reuse, STAR Visions embeds specific sustainable design practices within visual examples. The University of Technology Sydney student designs for 191 Thomas Street incorporated passive ventilation strategies, natural lighting optimisation, and material reuse from existing buildings, demonstrating that temporary adaptation need not compromise environmental performance standards. Well-designed adaptive reuse achieves environmental outcomes comparable to those of new green buildings while avoiding the embodied carbon impacts of demolition and construction. The Washington State University briefs explicitly focused on C and D-grade buildings, the secondary office stock facing the greatest vacancy and obsolescence risk. By demonstrating design possibilities for these buildings, Visions extend circular economy principles to building segments often dismissed as having limited reuse potential. This challenges the hierarchical logic that preserves only premium buildings while demolishing secondary stock, advancing more equitable approaches to urban sustainability.

6.3.3. Economic Value: Reducing Design Risk While Prioritising Social Purpose

From a transaction-cost perspective, design uncertainty represents a significant barrier to the implementation of temporary adaptation. Property owners and potential users face difficulty conceptualising how spaces could be adapted, leading to risk aversion. STAR Visions reduces this uncertainty by providing proven examples and visual references, lowering perceptual barriers to temporary use proposals. The Visions' economic value serves social and environmental objectives rather than maximising property returns. The design briefs explicitly prioritised "social equality, environmental impact, and sustainable reactivation" over financial optimisation. Examples included affordable co-working for social enterprises, community food ventures, and cultural venues that generate community benefit but may provide lower rental income than conventional commercial tenancies.

6.4. Tool 3: STAR Matchmaking Resource

STAR Tool 3 addresses the critical challenge of connecting building owners with suitable space seekers, serving as a facilitation mechanism for the marketplace. It streamlines the process of identifying compatible temporary users for underutilised spaces. This STAR Matchmaking Resource tool shares insights from our initial explorations of developing a platform to facilitate conversations between building owners and potential end-user organisations about STAR. It aims to help groups who want to operationalise the STAR Matchmaking Resource prototype and develop a fully operational STAR space.

6.4.1. Social Value: Access to Urban Space and Spatial Justice

In high-rent CBD markets like Sydney, community organisations, social enterprises, artists, and nonprofits face systematic exclusion from central locations despite the social value their activities generate (Madanipour, 2015). The Matchmaking Resource's social value lies in pragmatic incremental improvement, expanding community access to space within existing systems, while acknowledging that it cannot fundamentally transform unequal property relations.

6.4.2. Environmental Value: Maximising Building Utilisation

The Matchmaking Resource advances resource efficiency by maximising building utilisation. Vacant buildings represent wasted embodied energy and materials. The resources invested in original construction sit idle while new construction occurs elsewhere. By matching available space with potential users, the platform extends the usefulness of buildings, reducing the need for new construction to accommodate temporary users. Furthermore, by reducing vacant building periods, matchmaking reduces demolition pressure. Property owners facing extended vacancy may conclude buildings have reached economic obsolescence, triggering demolition decisions. Temporary use maintains buildings in active service, preserving options for future permanent adaptation when market conditions or building conversion feasibility improve. This temporal flexibility proves crucial in uncertain post-pandemic markets where long-term CBD office demand trajectories remain unclear.

6.4.3. Economic Value: Market Efficiency in Service of Collection Objectives

Market design theory demonstrates that well-designed matching mechanisms can dramatically improve market efficiency by reducing search costs and facilitating beneficial transactions. The Matchmaking Resource applies this principle to temporary space allocation: Property owners facing vacancy gain structured processes for identifying temporary users, while potential users access centralised information about available spaces rather than relying on informal networks. From an urban planning perspective, market efficiency serves collective ends rather than being an end. The Matchmaking Resource's economic value lies in maintaining property owner participation by reducing their costs of temporary-use arrangements, thereby enabling community organisations access to space. As Parmar et al. (2010) argue, stakeholder value creation requires addressing all parties' legitimate interests rather than optimising for individual actors.

6.5. Tool 4: STAR NCC Checklist

This tool addresses the crucial aspect of compliance with the National Construction Code (NCC) for temporary change-of-use projects. The NCC Checklist guides conversations between space owners, space seekers, and regulators, ensuring compliance with building standards and safety requirements. The best way forward is to develop an NCC Checklist of critical issues to consider when proposing a STAR. The NCC Code, formerly known as the Building Code of Australia, establishes minimum building design and construction standards across Australia. It is a performance-based code, developed by the Australian Building Codes Board, which regulates new and existing buildings. As STAR developments inherently involve a change-of-use for a part or whole of an existing building, compliance with the NCC is essential.

6.5.1. Social Value: Safety, Accessibility, and Universal Design

The NCC Checklist's primary social value lies in ensuring that temporary adaptive reuse maintains appropriate safety standards and accessibility for all users, including people with disabilities. Built environment regulations represent crucial mechanisms advancing spatial justice by requiring universal design principles. The checklist's explicit focus on fire safety and disability access embeds these equity considerations within temporary use planning from the initial feasibility assessment.

6.5.2. Environmental Value: Integrating Sustainability Standards

Beyond safety and accessibility, the NCC incorporates environmental performance standards addressing energy efficiency, ventilation, and sustainable design. The checklist's guidance to "discuss sustainability matters with a building certifier and owner" embeds environmental considerations within compliance assessment, countering assumptions that temporary uses exempt buildings from environmental standards. By ensuring environmental performance assessment occurs during temporary adaptation planning, the checklist ensures incremental improvements, contributing to building stock sustainability. Compliance guidance reduces the risk of temporary use failures requiring remediation. When temporary adaptations proceed without adequate assessment, safety deficiencies or structural issues may emerge, potentially requiring expensive corrections or leading to occupancy termination. These failures waste resources and undermine temporary use legitimacy. The checklist's preventive approach advances resource efficiency by ensuring temporary adaptations succeed rather than generating additional waste through failed implementations.

6.5.3. Economic Value: Reducing Regulatory Risk and Uncertainty

Regulatory uncertainty represents a substantial barrier to temporary adaptation. The NCC Checklist reduces this uncertainty by providing a structured assessment enabling early identification of compliance issues and cost estimation. Economic efficiency serves collective safety and accessibility objectives rather than constituting the primary goal. The checklist does not facilitate regulatory avoidance; it clarifies legitimate requirements, ensuring temporary uses meet community protection standards.

6.6. Tool 5: STAR SDG Mapping

This SDG tool is an integral component of the STAR toolkit, which has the overarching goal of normalising the concept of STAR as a strategy to reactivate vacant spaces within existing commercial office buildings. This tool is designed to align the STAR toolkit with the UN SDGs, showing STAR's contribution to global sustainability objectives. It supports mapping STAR initiatives to the SDGs and provides a framework for measuring and communicating broader sustainability impacts. It enables alignment between local temporary adaptation projects and global sustainability objectives.

6.6.1. Social Value: Connecting Local Action to Global Sustainability Commitment

The SDG Mapping tool addresses a critical challenge in contemporary urban planning: connecting place-based interventions to global sustainability frameworks and municipal climate commitments. Achieving UN SDGs requires not only national policy, but urban-scale implementation demonstrating how local actions contribute to global objectives. The tool enables temporary adaptive reuse projects to document their contributions to SDG 11 (Sustainable Cities), SDG 12 (Responsible Consumption), and SDG 13 (Climate Action). The mapping to SDG Target 11.3 (Inclusive Urbanisation and Civic Engagement) proves particularly significant from planning perspectives. By positioning temporary use as a civic engagement mechanism enabling communities to shape building reuse rather than accepting property owners or municipal decisions, the tool connects temporary adaptation to participatory planning principles. This reframing shifts temporary use from a property management tactic to a democratic urban planning practice.

6.6.2. Environmental Value: Operationalising Circular Economy and Climate Commitments

The SDG Mapping tool operationalises circular economy principles (identified through the World Business Council for Sustainable Development's Circular Transition Indicators) by connecting temporary adaptive reuse to measurable sustainability metrics: Resource Efficiency (SDG Targets 8.4 and 9.4) and Material Footprint and Circularity Rate (SDG Targets 12.2 and 12.5). These connections enable temporary use to contribute to municipal climate action plans and to national carbon-reduction commitments under the Paris Agreement. By mapping to SDG Target 13.3 (Climate Change Education and Awareness), the tool positions temporary use projects as public pedagogy, demonstrating sustainable building practices. When community organisations activate vacant buildings temporarily, they model adaptive reuse feasibility for broader audiences, potentially influencing future development decisions beyond immediate project boundaries.

6.6.3. Economic Value: Accessing Sustainable Finance While Serving Public Goals

Property owners face increasing pressure from investors, lenders, and regulators to report ESG performance, with SDG alignment serving as a recognised metric. From an urban planning perspective, the critical question is whether sustainable finance mechanisms serve public sustainability goals or merely create new profit opportunities. Sustainability can become another accumulation frontier where environmental and social benefits generate returns for capital while marginalised communities see minimal improvement. The SDG Mapping tool's value lies in its dual potential: enabling property owners to access sustainable finance while simultaneously strengthening municipal capacity to advance climate commitments through temporary-use policies. Whether this balance can be achieved requires empirical research examining implemented projects' actual sustainability outcomes beyond reported SDG alignment.

6.7. Tool 6: STAR ESG Scorecard

The STAR ESG Scorecard evaluates potential social value benefits of STAR initiatives in reactivating vacant spaces within commercial office buildings, aiming to provide a fair and impartial methodology for assessing social impact. It addresses significant gaps in ESG reporting within the property sector, where the quantification of "social value" is nascent compared to environmental impact measurements. The ESG Scorecard identifies key social attributes, such as a project's potential to generate additional income for the area, attract new user categories (e.g., charitable organisations, start-ups), contribute to the community, promote diversity and equity, focus on community well-being, ensure health and safety, aid tenant retention, create a sense of place, allow for short activation timescales, add value through social initiatives, support innovation and sustainable employment, and benefit neighbouring businesses, thereby meeting tenants' ESG objectives.

6.7.1. Social Value: Centering Community Benefits in Property Decisions

The ESG Scorecard's primary contribution lies in centering social value assessment within temporary adaptive reuse feasibility evaluation. Historically, property decisions prioritise financial returns with social impacts treated as externalities or secondary considerations. By providing a structured methodology for assessing social benefits, community contribution, diversity, human rights, health and safety, and sense of place, the Scorecard positions social impact as a core evaluation criterion alongside economic viability.

6.7.2. Environmental Value: Integrated Sustainability Assessment

While focused on social value, the ESG Scorecard contributes to environmental objectives through an integrated sustainability assessment encompassing social, environmental, and governance dimensions simultaneously. This integrated approach recognises that environmental sustainability cannot be separated from social equity and community welfare, a principle central to environmental justice scholarship. The Scorecard's social focus complements environmental metrics (SDG Mapping, embodied carbon retention), ensuring temporary use advances both sustainability pillars.

6.7.3. Economic Value: Redefining Property Value Beyond Financial Returns

The ESG Scorecard's most radical contribution may be its implicit challenge to current, narrow financial definitions of property value. By systematically measuring social impacts, community benefit, equity promotion, and place-making, the Scorecard positions these outcomes as constitutive of value rather than externalities. The critical question remains whether ESG frameworks fundamentally shift property sector priorities or merely provide new language for profit maximisation under sustainability banners.

6.8. Discussion

The underlying premise of STAR is retention of existing assets, a major progression in sustainability theory as climate change impacts have worsened and become more frequent (Pörtner et al., 2022). The STAR toolkit provides new avenues for owners and managers to meet stakeholder demand for "greening," influenced by the increasing applications of ESG policies (Arvidsson & Dumay, 2022).

The development of STAR is embedded in extant sustainability research and has achieved multiple uplifts in the field, particularly in Australia where adaptive reuse knowledge and application lags Europe (Kurul, 2007). The STAR toolkit increases physical sustainability by using existing built form, saving embodied energy, and reducing emissions associated with a "knock down–re-build" approach (Power, 2008). It explores reuse on a temporary basis to introduce this emergent approach to the sector, allowing for testing, analysis, and review (Warren, 2010). A major progression achieved through the introduction of STAR is the ability to educate stakeholders on this type of sustainability, and recent work confirmed that there remain knowledge shortfalls in early-stage testing and adoption (Sharifi et al., 2021). STAR is a key tool to assess a building's capacity to be reused, which has hitherto been lacking (Lorenz & Lützkendorf, 2008).

The results reflect a strong addition to a suite of approaches used in decision-making around sustainability retrofitting and adaptive reuse, and these research outcomes can expedite application of practical reuse measures through value creation mapping and process identification to bypass previously identified inhibitors.

7. Conclusion

As urban areas worldwide grapple with post-pandemic property market disruptions, the STAR toolkit offers a replicable framework for transforming underutilisation challenges into value creation opportunities. Its emphasis on temporary adaptation provides flexibility to respond to uncertain market conditions while

maintaining options for future development, making it particularly relevant for contemporary urban planning and property management practices. The STAR toolkit's integration of sustainability principles, community engagement, and commercial viability enables value creation through the utilisation of adaptive reuse. This evolution reflects broader trends toward regenerative development approaches that seek to create positive impacts rather than merely minimising negative effects.

The STAR toolkit represents a significant advancement in addressing contemporary commercial property challenges through innovative temporary adaptation strategies. By integrating six complementary tools within a comprehensive framework, the toolkit enables systematic value creation across environmental, social, and economic dimensions. The toolkit's contribution to value creation operates through multiple mechanisms: market efficiency improvements, risk mitigation, resource optimisation, community activation, and sustainability enhancement. These benefits align with growing emphasis on ESG performance in real estate investment and management, positioning STAR as a forward-looking response to evolving market demands. However, successful implementation requires addressing significant challenges, including regulatory complexity, stakeholder coordination, and measurement difficulties. The toolkit's long-term impact will depend on its ability to demonstrate measurable value creation and achieve widespread adoption across diverse markets.

Future research and implementation efforts should focus on validating the STAR toolkit's effectiveness across diverse contexts, refining measurement approaches, and developing supportive policy frameworks to maximise its potential contribution to sustainable urban development and commercial property value creation.

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Conflict of Interests

The authors declare no conflict of interests.

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