

# 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.

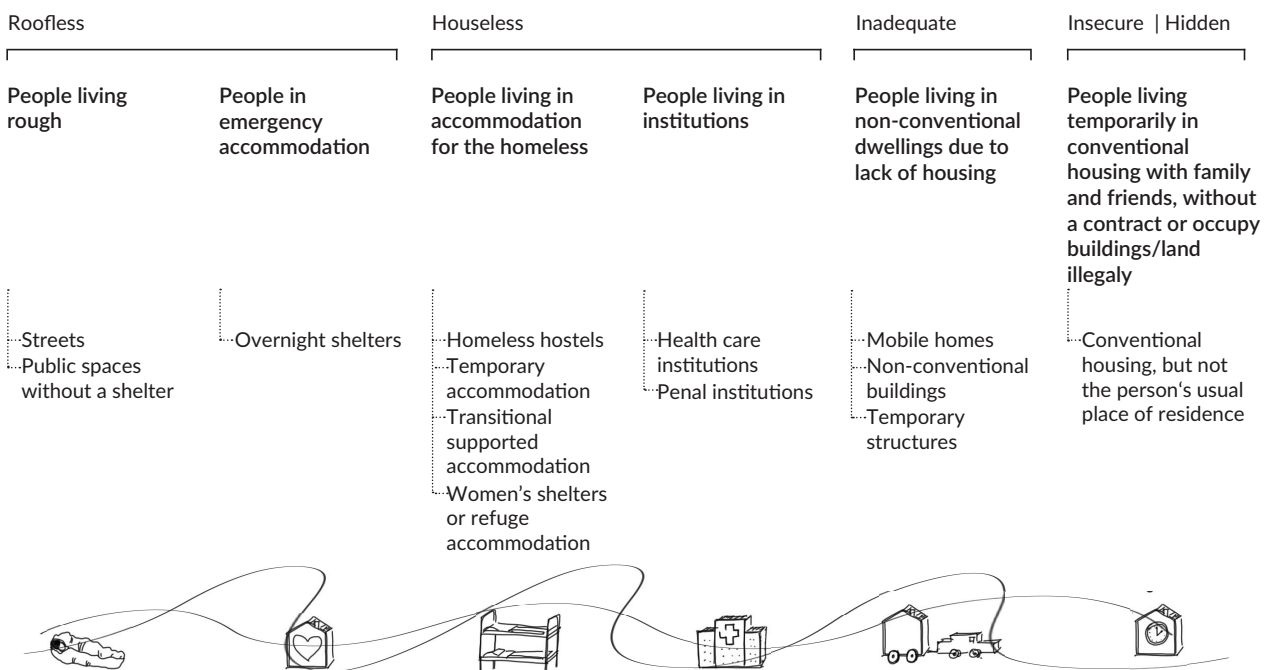
## Keywords

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

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).



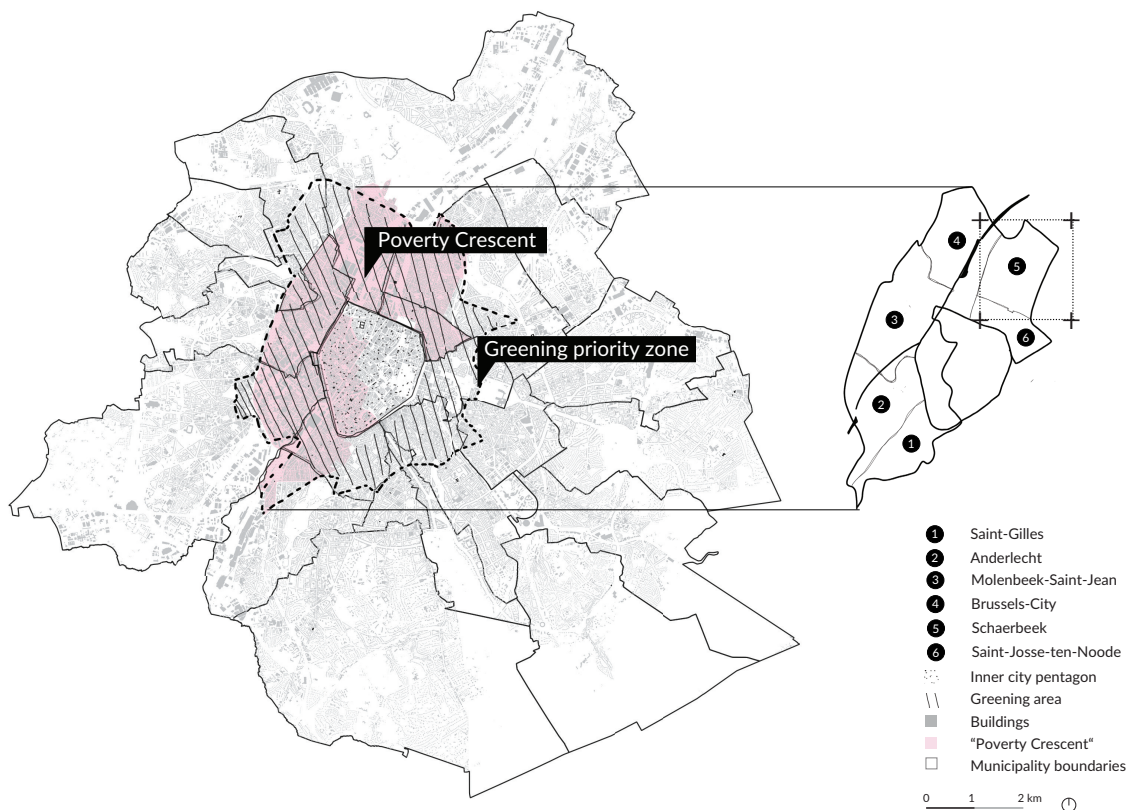
**Figure 1.** Fluctuating conditions of homelessness based on ETHOS light. Source: own work based on FEANTSA (2007).

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 reimaged 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.

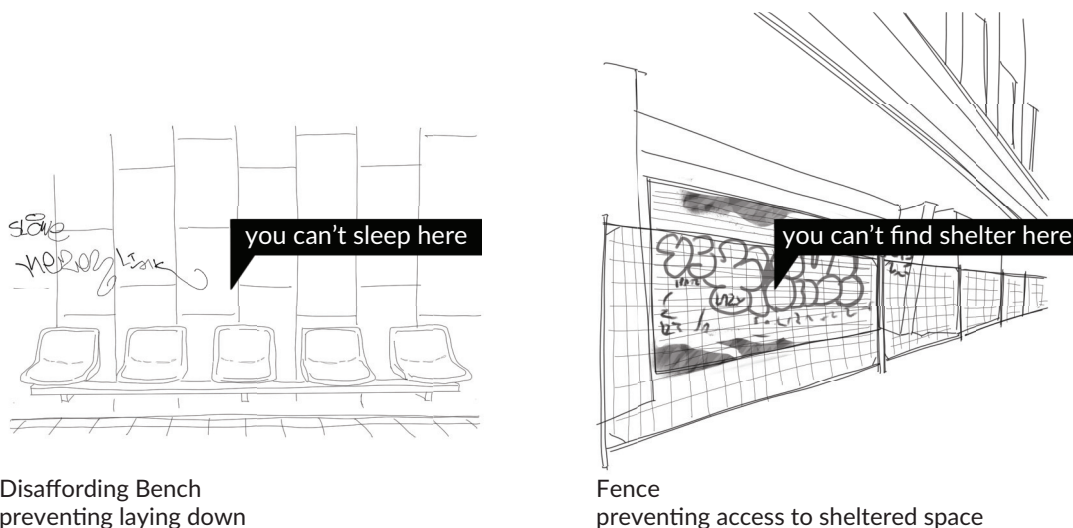
Health and Security corresponds primarily to Max-Neef’s category of subsistence and protection, as well as Boccagni and Duyvendak’s emotion of security, and is not necessarily related to youth in particular, but more to the understanding that everyone requires access to a safe place to rest, nutritious 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.



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.



**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.



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.

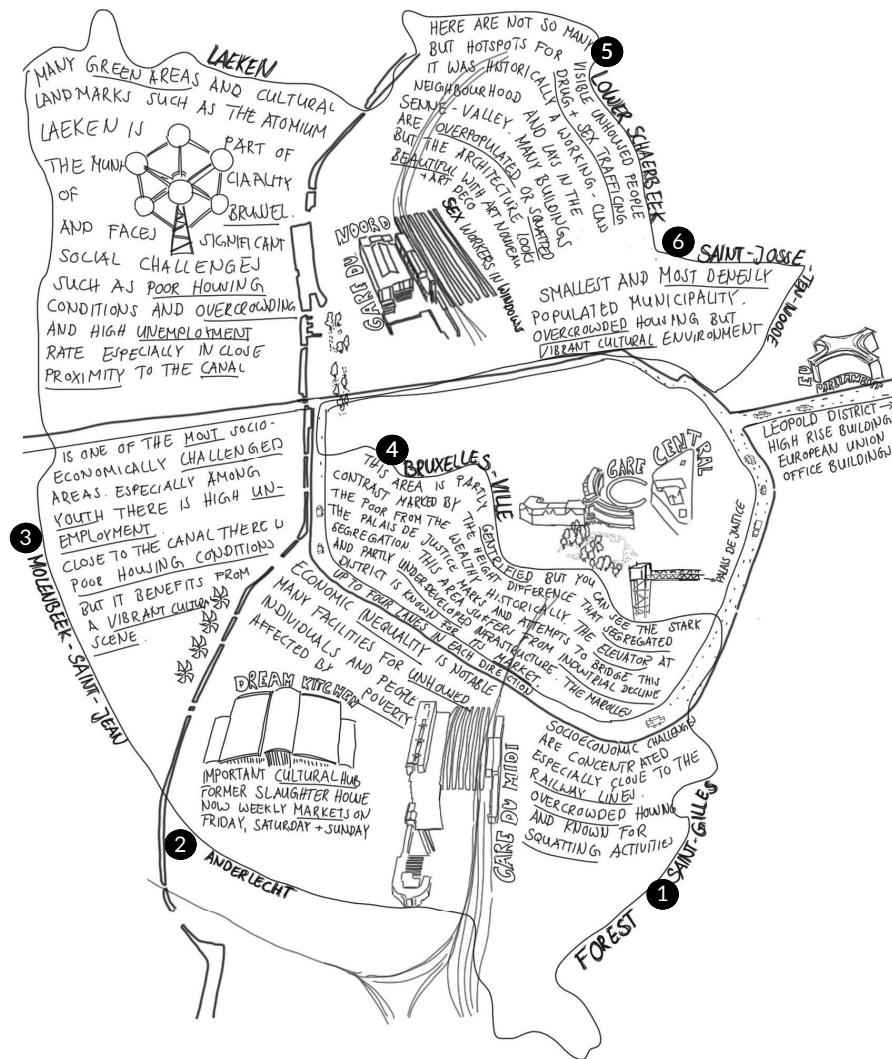
### 4.3. *Everyday Spatial Practices of Care*

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.



1. Church Entrance adapted to provide shelter

2. Colonades and Steps provide shelter

3. Sheltered Postboxes provide registration

4. Windowsill activated for food distribution

5. Empty Corner activated for gardening

6. Watertap in Building Facade activated for wateraccess

7. Benches Under Trees allow people to gather

8. Public Power Plug adapted to do laundry

9. Community Kitchen brings people together

■ Socio-Spatial Process of Care   ■ Socio-Spatial Affordance

**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.

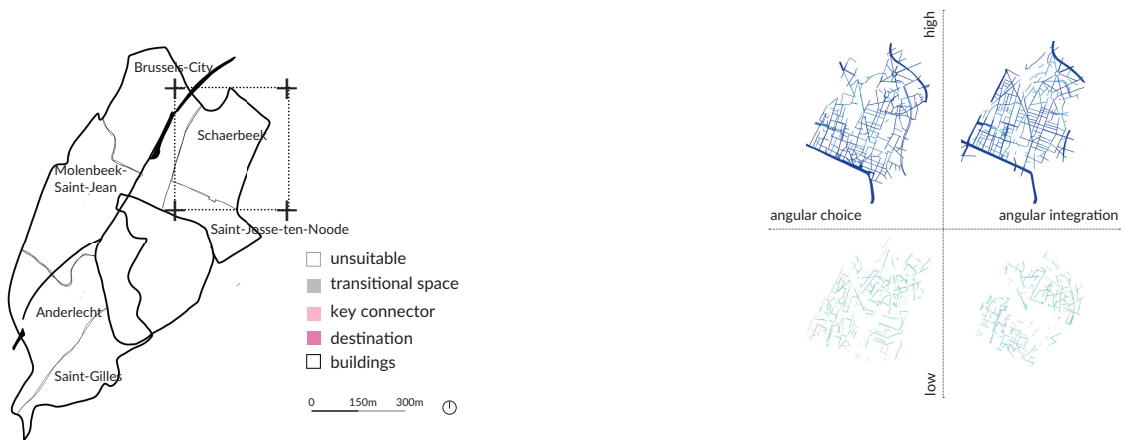
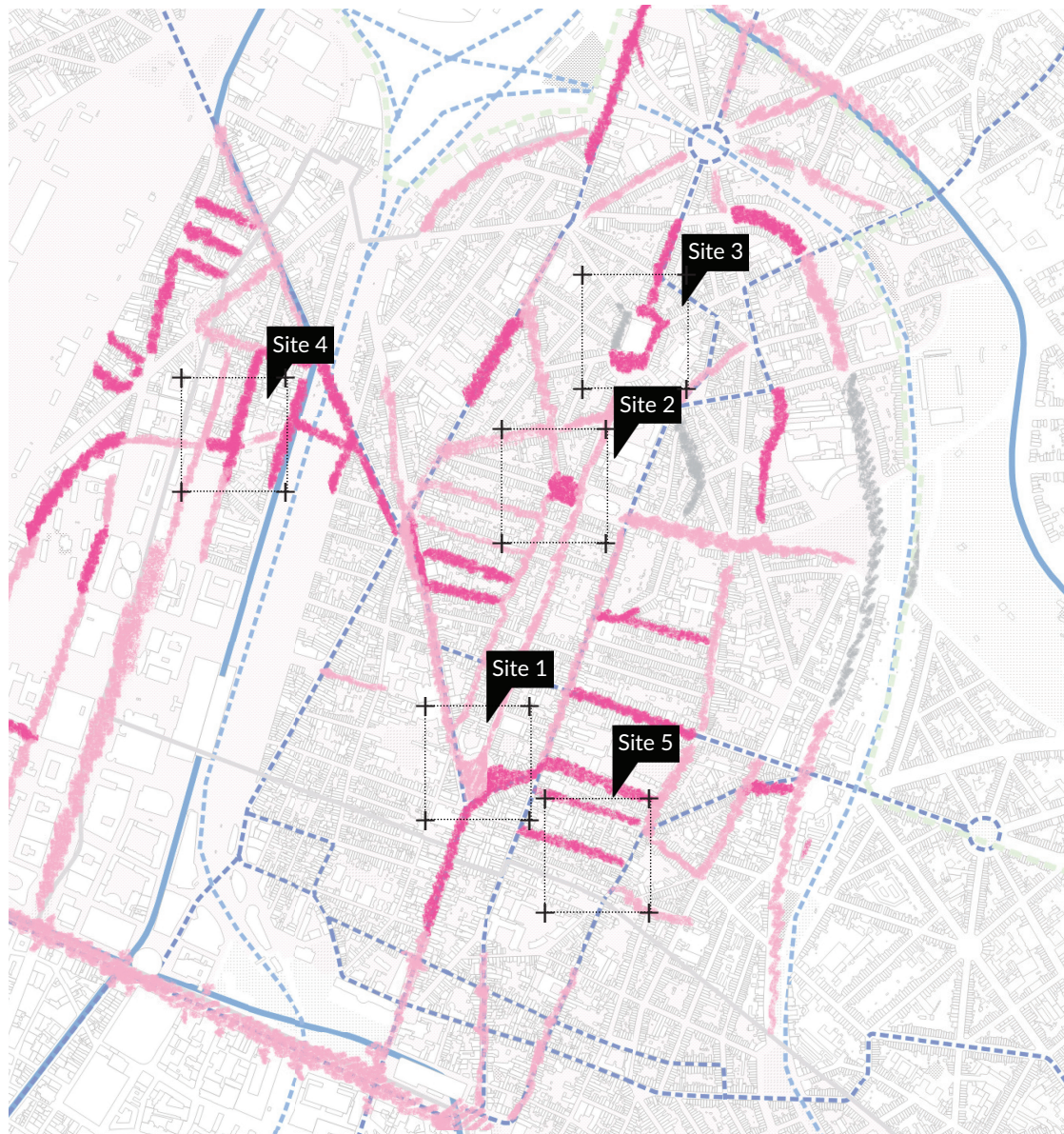
Combining these three categories can actively support the satisfaction of socio-spatial needs for Health and Security, Community and Solidarity, and Autonomy and Agency, and help improve the liveability of fluidly housed youth. However, to create a safe and healthy environment where fluidly housed youth 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. These 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.

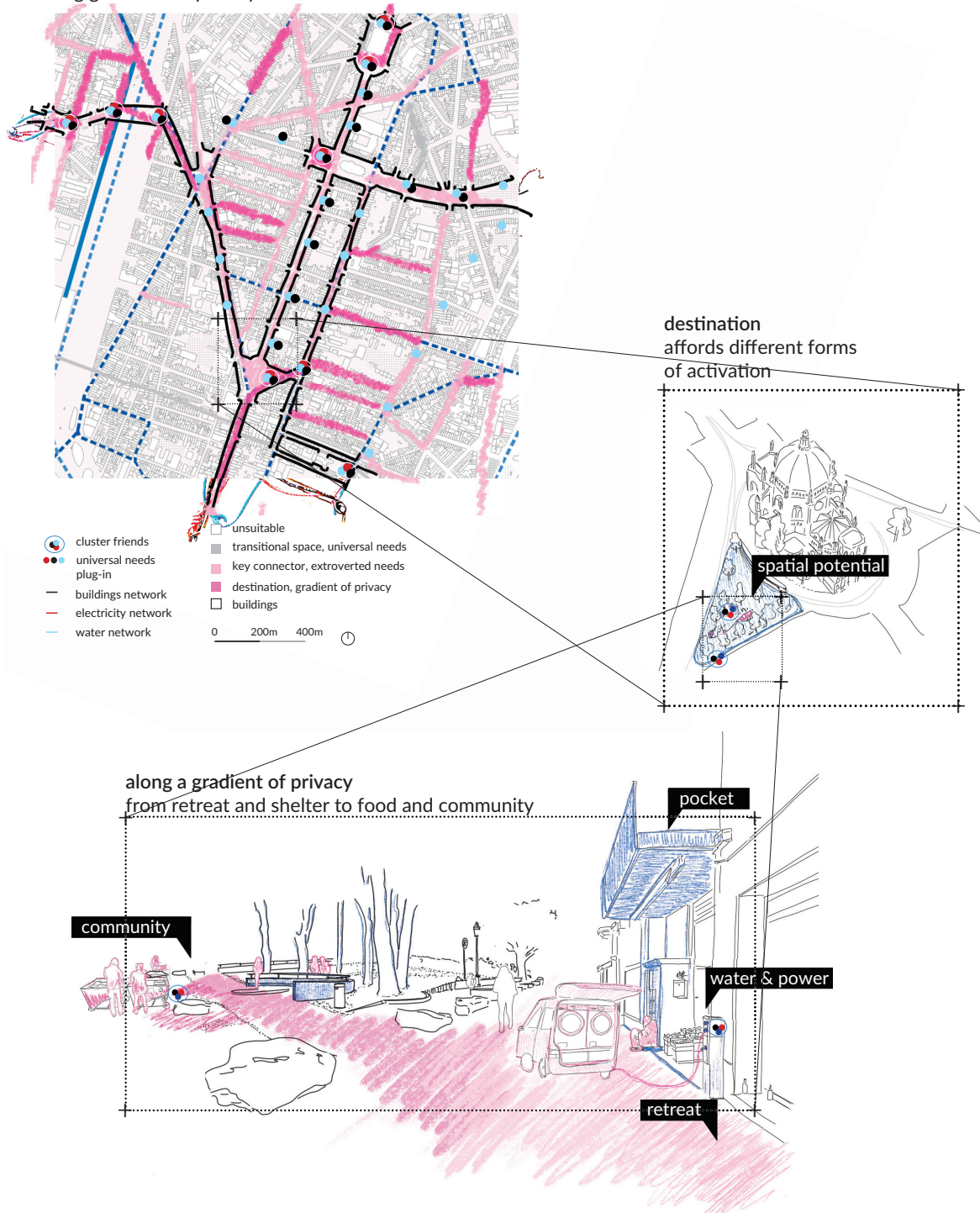
## 5. Discussion: Toward Two Complementary Infrastructures of Care

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.

planning infrastructural networks and spatial potentials along gradients of privacy



**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 Stadlander, most directly shaped its direction, in dialogue with and critically supported by Birgit Hausleitner and Caroline Newton.

Wiebke Stadlander 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.

### References

- Alexander, C., Ishikawa, S., & Silverstein, M. (1977). *A pattern language: Towns, buildings, construction*. Oxford University Press.
- Allen, K. A., Kern, M. L., Vella-Brodrick, D., Hattie, J., & Waters, L. (2018). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review*, 30(1), 1–34. <https://doi.org/10.1007/s10648-016-9389-8>
- Bloh, D. (2020). *Unter Palmen aus Stahl: Die Geschichte eines Straßenjungen*. Hanser.
- Boccagni, P., & Duyvendak, J. W. (2021). Homemaking in the public: On the scales and stakes of framing, feeling, and claiming extra-domestic space as “home.” *Sociology Compass*, 15(6), Article e12886. <https://doi.org/10.1111/soc4.12886>
- Brussels Capital Region. (2024). *International organisations and the Brussels-Capital Region*. <https://be.brussels/en/international-europe/international-relations/international-organisations-and-brussels-capital-region>

- Brussels Instituut voor Statistiek en Analysis. (2022). *Gemiddeld equivalent inkomen per inwoner na belastingen (€)*. Wijkmonitoring. <https://wijkmonitoring.brussels/Indicator/IndicatorPage/2500?Year=2022&GeoEntity=2&SubTheme=28>
- Carolan, C. (2024, February 6). 'Brussels paradox': A wealthy region with an 'acute' housing crisis. *The Brussels Times*. <https://www.brusselstimes.com/912185/brussels-paradox-a-wealthy-region-with-an-acute-housing-Crisis-tbtb>
- Comune di Bologna. (2014). *Regulation on collaboration between citizens and the city for the care and regeneration of urban commons*. [http://comunita.comune.bologna.it/sites/comunita/files/allegati\\_blog/bolognaregulation.pdf](http://comunita.comune.bologna.it/sites/comunita/files/allegati_blog/bolognaregulation.pdf)
- Creswell, J. W. (2002). *Research design: Quantitative, qualitative, and mixed methods approaches* (2nd ed.). Sage.
- Datastore.Brussels. (2024). *UrbIS - Administrative units* [Data set]. <https://datastore.brussels/web/data/dataset/f6b83500-6a62-11ed-be6d-010101010000>
- Dorst, K., & Cross, N. (2001). Creativity in the design process: Co-evolution of problem-solution. *Design Studies*, 22(5), 425–437. [https://doi.org/10.1016/S0142-694X\(01\)00009-6](https://doi.org/10.1016/S0142-694X(01)00009-6)
- Dunne, A., & Raby, F. (2013). *Speculative everything: Design, fiction, and social dreaming*. MIT Press.
- Dupuis, A., & Thorns, D. (1998). Home, home ownership and the search for ontological security. *The Sociological Review*, 46(1), 24–47.
- Ending youth homelessness: Policies, measures and success factors. (2021, April 20). *UN-Habitat*. <https://unhabitat.org/news/20-apr-2021/ending-youth-homelessness-policies-measures-and-success-factors>
- Erikson, E. H. (1968). *Identity: Youth and crisis*. W. W. Norton & Company.
- Euro Cities. (2023). *Ending youth homelessness in cities*. <https://eurocities.eu/wp-content/uploads/2023/11/Final-report-Ending-youth-homelessness-in-cities.pdf>
- European Commission. (2024). *Homelessness*. [https://employment-social-affairs.ec.europa.eu/policies-and-activities/social-protection-social-inclusion/addressing-poverty-and-supporting-social-inclusion/homelessness\\_en](https://employment-social-affairs.ec.europa.eu/policies-and-activities/social-protection-social-inclusion/addressing-poverty-and-supporting-social-inclusion/homelessness_en)
- European Federation of National Organisations Working with the Homeless. (2007). *ETHOS*. <https://www.feantsa.org/ethos>
- European Federation of National Organisations Working with the Homeless. (2023). *Eighth overview of housing exclusion in Europe*. <https://www.feantsa.org/resources/8th-overview-of-housing-exclusion-in-europe-2023>
- European Federation of National Organisations Working with the Homeless. (2024). *Ninth overview of housing exclusion in Europe*. [https://www.feantsa.org/public/user/Activities/events/2024/9th\\_overview/Rapport\\_-\\_EN.pdf](https://www.feantsa.org/public/user/Activities/events/2024/9th_overview/Rapport_-_EN.pdf)
- Fezer, J. (2022). *Umstrittene Methoden: Architekturdiskurse der Verwissenschaftlichung, Politisierung und Mitbestimmung in den 1960er Jahren* (1st ed.). Adocs Produktion und Verlag.
- Fisher, B., & Tronto, J. C. (1990). Toward a feminist theory of caring. In E. K. Abel & M. K. Nelson (Eds.), *Circles of care: Work and identity in women's lives* (pp. 35–62). State University of New York Press.
- Gabauer, A., Knierbein, S., Cohen, N., Lebuhn, H., Trogal, K., Videman, T., & Haas, T. (Eds.). (2021). *Care and the city: Encounters with urban studies* (1st ed.). Routledge. <https://doi.org/10.4324/9781003031536>
- Gibson, J. J. (1986). *The ecological approach to visual perception*. Lawrence Erlbaum Associates.
- Giddens, A. (1991). *Modernity and self-identity*. Stanford University Press.
- Gould, R. K., Himes, A., Anderson, L. M., Arias Arévalo, P., Chapman, M., Lenzi, D., Muraca, B., & Tadaki, M. (2024). Building on Spash's critiques of monetary valuation to suggest ways forward for relational values research. *Environmental Values*, 33(2), 139–162. <https://doi.org/10.1177/09632719241231422>

- Graeber, D. (2001). *Toward an anthropological theory of value*. Palgrave Macmillan. <https://doi.org/10.1057/9780312299064>
- Hägerstrand, T. (1970). What about people in regional science? *Papers of the Regional Science Association*, 24, 6–21.
- Hillier, B., & Hanson, J. (1984). *The social logic of space*. Cambridge University Press.
- Hillier, B., & Iida, S. (2005). Network and psychological effects in urban movement. In A. G. Cohn & D. M. Mark (Eds.), *Spatial information theory. COSIT 2005* (pp. 475–490). Springer.
- Home. (n.d.). In *Merriam-Webster's online dictionary*. <https://www.merriam-webster.com/dictionary/home>
- Honneth, A. (1995). *The struggle for recognition: The moral grammar of social conflicts*. Polity Press.
- Jacobs, J., Albers, G., & Jacobs, J. (2015). *Tod und leben grosser amerikanischer Städte* (4th ed., shortened edition). Bauverlag.
- Joie, C., Douieb, K., Noirfalisse, Q., Sanchez, A., & Herda, A. (2022). *Ailing Brussels—Portrait of a city where inequalities operate in a vicious cycle*. Médor. <https://bxl-malade.medor.coop/?lang=en>
- Kuurne, K., & Gómez, M. V. (2019). Feeling at home in the neighbourhood. *City & Community*, 18(1), 213–237.
- Lloyd, P. (2019). You make it and you try it out: Seeds of design discipline futures. *Design Studies*, 65, 167–181.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3(5), 551–558.
- Marcus, L., Giusti, M., & Barthel, S. (2016). Cognitive affordances in sustainable urbanism: Contributions of space syntax and spatial cognition. *Journal of Urban Design*, 21(4), 439–452.
- Martin, K. (2020). *Ethnography made easy*. City University of New York.
- Max-Neef, M. (1991). Development and human needs. In M. Max-Neef, A. Elizalde, & M. Hopenhayn (Eds.), *Human scale development: Conception, application and further reflections* (pp. 13–54). Apex Press.
- Minton, A. (2009). *Ground control: Fear and happiness in the twenty-first-century city*. Penguin Books.
- Miraftab, F. (2022). Insurgent practices of hope & care for humane urbanism. In R. Rocco & C. Newton (Eds.), *Manifesto for the just city* (Vol. 2, pp. 36–39). TU Delft OPEN.
- Miraftab, F. (2023, February 13). Planning for humane urbanism through solidarity and radical care. *Society and Space*. <https://www.societyandspace.org/articles/planning-for-humane-urbanism-through-solidarity-and-radical-care>
- Miraftab, F., & Huq, E. (2024). Urbanizing social reproduction: (Re)thinking the politics of care in capitalist urban development. *Environment and Planning D: Society and Space*, 42(2), 234–253.
- Opendatasoft. (n.d.). *World Administrative Boundaries—Countries and Territories*. [Dataset]. <https://public.opendatasoft.com/explore/dataset/world-administrative-boundaries/export/?flg=en-us>
- OpenStreetMap. (n.d.). *Belgium—Building layer* [Dataset]. <https://download.geofabrik.de/europe/belgium.html>
- Pelto, P. J. (2013). Mapping: A powerful tool in ethnographic research. In *Applied ethnography: Guidelines for field research* (pp. 207–214). Routledge.
- Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a General Theory of Planning. *Policy Sciences*, 4, 155–169.
- Rocco, R., & Lopez, H. (Hosts). (2022, October 24). “Planning for solidarity in diversity” with Stijn Oosterlynck (Season 2, Episode 3) [Audio podcast episode]. In *Duty of Care: A podcast for the just city*. Spotify. <https://open.spotify.com/episode/5nmFAyuPa7xgx53s0MR6EO>
- Rosa, H. (2019). *Resonance: A sociology of our relationship to the world*. Polity Press.
- Rose, T., Shdaimah, C., de Tablan, D., & Sharpe, T.L. (2016). Exploring wellbeing and agency among urban youth through photovoice. *Children and Youth Services Review*, 67, 114–122. <https://doi.org/10.1016/j.childyouth.2016.04.022>

- Sánchez, I. G. (2023). Care commons: Infrastructural (re)compositions for life sustenance through yet against regimes of chronic crisis. *Urban Studies*, 60(12), 2456–2473.
- Schneider, L. T. (2024, April 26). *Leben ohne Privatsphäre: Was Wohnungslose über unsere Gesellschaft sagen* [Television broadcast]. BR/ARD Alpha. <https://www.br.de/fernsehen/ard-alpha/sendungen/campus/obdachlose-leben-ohne-privatsphaere-100.html>
- Shahrokh, T. (2022). Finding ‘belonging’ in the caring relationships of young people with migration experiences in South Africa. *Journal of the British Academy*, 10(s2), 15–36.
- Sheringham, O. (2025). Creating cities of care: Towards a new radical care framework for geographical research with urban migrants and refugees. *Progress in Human Geography*, 49(3), 266–285.
- Smith, N. (1996). *The new urban frontier: Gentrification and the revanchist city*. Routledge.
- Stadtlander, W. (2025). *Carescapes: Toward a careful imagination for the liveability of young fluidly housed adults in Brussels* [Unpublished master’s thesis]. TU Delft. <https://resolver.tudelft.nl/uuid:228f7f4f-c448-4bb7-b75c-22ebf78feb6f>
- Strüver, A., & Franz, Y. (2025). Reclaiming the city through care: Public urban cultures of care. *Urban Planning*, 10, Article 11108. <https://doi.org/10.17645/up.11108>
- Van Crielingen, M. (2006). What is happening to Brussels’ inner-city neighbourhoods? Selective migration from areas undergoing gentrification. *Brussels Studies*, 1. <https://doi.org/10.4000/brussels.303>
- van Nes, A., & Yamu, C. (2021). *Introduction to space syntax in urban studies*. Springer. <https://doi.org/10.1007/978-3-030-59140-3>

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