NETWORKS OF CARE

RESEARCH REPORT

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ABSTRACT

This research explores the role of care networks and care nodes within the urban context of Tarwewijk, Rotterdam. Grounded in care ethics and spatial analysis, the study investigates how informal and formal care practices are distributed and shaped by architectural characteristics. Employing qualitative methodologies, including semi-structured interviews, participant observation, and spatial mapping, the research reveals fragmented care networks, emphasizing reliance on immediate neighbours and informal care nodes such as community centres and creative spaces. Key findings demonstrate that architectural features, including visibility, accessibility, and spatial configurations, play a critical role in enabling or hindering care practices. Design guidelines are proposed to enhance inclusivity, foster social cohesion, and address spatial inequities, providing a framework for integrating care ethics into urban design. This study aims to contribute to a deeper understanding of care as a spatial and relational practice, advocating for an inclusive approach to urban planning that nurtures community connections and well-being.

Key words:
Care ethics, care networks, care nodes, spatial analysis, urban design, inclusivity, Tarwewijk.

CHAPTER 1
INTRODUCTION

Architects care[1]. Or perhaps, architects should care? Care about the well-being of individuals and communities, and care to create spaces that support their physical, emotional, and social needs. This involves not just functional design but also an approach that deeply considers how environments can nurture and sustain human relationships and community connections.

Modern societies are facing a growing crisis in providing adequate care, particularly as populations age. In the Netherlands, as in many European countries, shifting demographics, such as an aging population (CBS, 2020), along with the erosion of the welfare state, are placing increasing pressure on both formal healthcare systems and informal care networks (Verbeek-Oudijk, 2019). These networks, often conceptualized in literature as webs of social relations, provide essential support for individuals while addressing gaps in institutional care (Ho et al., 2020; Rutherford & Bowes, 2014). However, the physical dimensions of these networks remain underexplored, especially in the context of how collective spaces can facilitate care interactions.

This research introduces the concept of care nodes, spatially defined points within neighbourhoods that act as hubs for informal and formal care activities. Unlike studies that emphasize social networks (e.g., Kemp et al., 2013; Rutherford & Bowes, 2014), the care nodes concept foregrounds the architectural and urban design aspects of care.

By situating care within the physical (urban) landscape, this study builds on literature which examines the relationship between space, care practices, and well-being (e.g. Ho et al., 2021; Milligan & Wiles, 2010). The aim is to bridge existing gaps in the literature by exploring how collective community spaces function as informal care nodes and contribute to care networks.

Evidence suggests that neighbourhood social cohesion and participation in community life are positively associated with both physical and mental health (Pérez et al., 2020), further supporting the importance of such spaces in fostering well-being. Collective community spaces such as parks, community centres, and shared facilities could foster social cohesion and enhance well-being by creating opportunities for informal interactions and support. In this way, these spaces function as essential care nodes within networks of care.

By adopting a feminist perspective, which emphasizes the importance of care, relationships, and interdependence, this study draws on the works of care ethicist such as Tronto (1993) and Held (2005) to explore care networks.

[1] This phrase draws inspiration from Nicholas Coetzer's exploration of "an architecture of care" in his analysis of the architect's moral responsibility. Coetzer emphasizes that caring is intrinsic to the architectural discipline, framing it as both an ethical foundation and a commitment to social and environmental considerations in design (Coetzer, 2023).

Research Question

To guide this exploration, the study is structured around the following key research questions:

- How can spatial mapping of existing care networks reveal the strengths and weaknesses of care nodes within urban neighbourhoods?
  This question examines the distribution and functionality of care networks, identifying gaps and barriers to care through mapping and qualitative analysis.

- What role do architectural characteristics play in shaping care network nodes in urban neighbourhoods?
  This question explores how design features like visibility, accessibility, and spatial configurations influence the effectiveness and inclusivity of care nodes.

Case Study: Tarwewijk, Rotterdam

The neighbourhood of Tarwewijk, located in the south of Rotterdam, Netherlands, serves as the focal point for this research and forms the basis of a detailed case study (figure 1). Tarwewijk was primarily developed before 1945 to accommodate workers drawn to the city's expanding port. By the 1970s, however, the neighbourhood began experiencing significant challenges, with poor living conditions and urban decline contributing to dissatisfaction among residents (Van der Laar, 2007). Today, Tarwewijk faces a range of socio-economic issues, including concerns about safety, crime, poverty, inadequate street cleanliness, and poor maintenance of public spaces (Koning, 2018). These characteristics make Tarwewijk a compelling case study for exploring care networks, as its socio-economic diversity, historical development, and urban challenges provide a rich context.

Reading guide

This report explores care networks and care nodes in urban neighbourhoods, focusing on Tarwewijk, Rotterdam. Chapter 2 introduces the theoretical framework, establishing care ethics and spatial theories. Chapter 3 explains the research methods, including interviews, mapping, and site visits. Chapter 4 analyzes care networks in Tarwewijk, highlighting strengths and gaps. Chapter 5 examines the architectural characteristics of care nodes, exploring how design influences care practices. Finally, Chapter 6 concludes with design guidelines to enhance care nodes and foster inclusive urban environments.

Fig. 1 Aerial Image of Tarwewijk, Rotterdam (Google, 2023).

TARWEWIJK

THEORETICAL FRAMEWORK

Care Ethics and the Environment

This research draws from feminist care ethics to establish the conceptual foundation for understanding care as a relational and ethical practice. The works of political theorist Joan Tronto and philosopher Virginia Held emphasize that care is not just a functional activity but a moral and emotional obligation linked to social relationships and power dynamics (Held, 2005; Tronto & Fisher, 1990). Care is inherently situated within personal contexts, where emotional and ethical aspects are as vital as the practicalities of providing care.

At its core, care is defined by Joan Tronto and Berenice Fisher in their foundational work on care ethics (Tronto & Fisher, 1990) , notably outlined in the chapter "Caring Architecture" from the book Critical Care: Architecture and Urbanism for a Broken Planet (2019). They describe care as:

> "*a species activity that includes everything we do to maintain, continue, and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life-sustaining web.*"(Tronto & Fisher, 1990, p. 34)

This definition is particularly striking for architects, as it highlights the interplay between human activity and the environment, emphasizing the responsibility to maintain, continue, and repair the physical spaces that sustain life. By positioning care as a holistic activity that encompasses both human relationships and the built environment, it challenges architects to design spaces that actively support this life-sustaining web.

The book The Caring City: Ethics of Urban Design by Welsh architect Juliet Davis (2022), deepens this understanding by exploring how urban design can embody and facilitate an ethic of care. Davis highlights that care extends beyond individual actions, encompas-

sing urban design practices that foster interdependence, inclusivity, and well-being. Urban design, she argues, mediates relationships by creating spaces that encourage social interaction and mutual support. Streets, cafes, and green areas can function as informal "spaces of care," providing opportunities for connection and emotional support. Furthermore, care in urban design is about fostering resilience and sustainability, ensuring that cityscapes meet the needs of current and future generations (Davis, 2022). This aligns with Tronto's assertion that care involves "maintaining, continuing, and repairing our world." (Tronto & Fisher, 1990, p. 34)

Drawing from Ali Madanipour's reflections, an urban planner and professor at Newcastle University, in the chapter "Critical Reflections on Care" from Care and the City: Encounters with Urban Studies (2022), care is explored as a deeply contested concept within the urban context. Madanipour underscores how spaces are often designed with neglect or exclusion in mind, despite the ethical instructions of inclusion and support. This duality highlights the ethical challenges architects and planners face in addressing care as a social and spatial responsibility. His analysis complements the broader ethical perspective of care as a framework for urban inclusion, sustainability, and resilience. While Davis (2022) presents an aspirational perspective on care, focusing on how urban design can actively embody and facilitate care, Madanipour highlights the tension between care and uncare in cities. This contrast enriches the discussion, emphasizing both the potential and the challenges of addressing care in urban environments.

Care Networks and Care Nodes

Building on this foundation, the concept of care networks plays a critical role in this research. Rutherford and Bowes (2014), researchers known for their work on informal caregiving and its socio-economic implications, emphasize the importance of informal care networks, highlighting their socio-economic significance and the critical role they play in meeting care needs that formal systems often fail to address. Informal care networks involve family, friends, and neighbours providing unpaid support, often driven by proximity and relational bonds, and these networks evolve based on changing care demands and social dynamics.

Kemp et al. (2013), American researchers in caregiving and social care, introduce the "convoy of care" model, which conceptualizes care relationships as dynamic, evolving systems encompassing both formal and informal caregivers. This model highlights the fluidity of care structures and their ability to adapt over time, influen-

ced by individual needs and the availability of resources. The convoy model underscores the intersection of formal and informal care, where these spheres often overlap rather than exist in isolation. This integration reflects the complexity and adaptability of care systems.

Social geographers Milligan and Wiles (2010) provide a foundational perspective with their concept of "landscapes of care," which highlights the geographical and spatial context of care relationships. This framework challenges the notion that care only happens within specialized institutions, instead recognizing that care occurs across a variety of spaces, including public areas, homes, and neighbourhoods. Building on this spatial understanding of care, this research introduces the concept of care nodes as specific, spatially defined places that serve as focal points for both informal and formal care activities.

Landscapes of care also stress the role of proximity and emotional ties, suggesting that thoughtful spatial planning can foster deeper connections between individuals and their care environments, ultimately enhancing the overall quality and sustainability of care (Milligan & Wiles, 2010).

Ho et al. (2021), researchers based in Singapore specializing in spatial care practices and qualitative GIS methods, offer additional insights with their concept of "webs of care," which examines how care relationships are embedded in spatial and temporal contexts. Their work leverages qualitative GIS methodologies to map the care routines of older adults in Singapore, illustrating how care practices are shaped by both micro-level personal interactions and macro-level institutional frameworks. This perspective highlights the agency of caregivers and care recipients in navigating these webs and underscores the existence of care nodes.

With Danish anthropologist Rasmussen's (2017) notion of "para-homes", the care node concept is expanded, illustrating how urban spaces like parks or local cafes become informal extensions of home environments for the elderly. These spaces offer emotional comfort and foster attachment, and thus functioning as valuable nodes in the care network. His work examines how these para-homes, formed through small-scale mobility and habitual use, offer a sense of security and community. Rasmussen's research further highlights how the availability and maintenance of such spaces significantly influence the effectiveness of care networks.

Dutch researcher Fenna Smits (2024), affiliated with the Sociology Department at the University of Amsterdam, examines health commons, emphasizing how shared infrastructures sustain collec-

tive care and well-being. Her work highlights the maintenance of both social and material components, such as communal buildings and tools, to support care networks over time. By exploring the interplay between human and material factors, Smits illustrates how community-managed resources foster collaboration and mutual aid. This "care of things" perspective underscores the critical role of maintaining both social bonds and physical infrastructures in sustaining care networks. Additionally, her analysis reveals how the commons serve as collaborative spaces where care relationships are negotiated and shared responsibilities distributed.

Together, these frameworks provide a multifaceted and deeper understanding of care networks and the spatial concept of care nodes, showcasing their relational, dynamic, spatial, and material dimensions. Care nodes, as spatially defined hubs, emerge as critical components, connecting social relationships, spatial configurations, and material resources in meaningful ways. This comprehensive perspective enables this research to analyze how care networks and care nodes operate within diverse urban contexts.

Architectural Context

The role of architecture in care practices is deeply intertwined with the design of spaces that foster human interaction, inclusivity, and well-being. Drawing from Rob Imrie, a sociologist at Goldsmiths, University of London, with expertise in disability and urban design, and Kim Kullman, a researcher specializing in inclusive design and urban mobility, in their work (2016), architecture serves as an active participant in creating environments that facilitate care by integrating the interactions between bodies, buildings, and cities. This perspective situates architectural design not just as a functional practice but as an ethical act, embedding care into the material and spatial aspects of urban life.

Affordance-based architectural theory, rooted in the work of ecological psychologist James J. Gibson, emphasizes the relationship between the environment and its users. Gibson introduced the concept of affordances in his seminal work, The Ecological Approach to Visual Perception (1979), defining affordances as the actionable possibilities that an environment provides to an individual based on their capabilities. In architectural theory, this concept has been expanded by scholars such as Maier, Fadel and Battisto (2009), discussed in their article An Affordance-Based Approach to Architectural Theory, Design, and Practice, who explore how the built environment enables or constrains behaviours by offering cues and opportunities for interaction. This approach provides a framework for understan-

ding how architectural elements, such as doorways, seating, and pathways, enable or constrain certain behaviours. The concept of affordances suggests that spaces can actively 'invite' care practices by supporting them through features like accessibility, comfort, and ease of interaction. Scholars Lanng and Jensen (2022) expand on this by illustrating how affordances emerge not only from physical elements but also through the interactions between users and spaces, creating dynamic and relational opportunities for engagement. The perspective of affordances aligns with British architect Thomas Markus' (1993) analysis of architecture as a social object, discussed in his book Buildings and Power: Freedom and Control in the Origin of Modern Building, where the built environment not only reflects but also shapes human behaviour. Markus (1993) argues that architectural forms act as mediators of social relations, influencing how individuals interact with each other and their surroundings. Integrating affordance theory with this social perspective highlights the dynamic interplay between design and human activity, making it a critical consideration in the context of care environments.

Adding to this, French philosopher Henri Lefebvre's theory of the social production of space offers a broader lens for understanding how architecture and spatial design are not neutral acts but are deeply influenced by social, political, and cultural forces (The Production of Space, 1991). Lefebvre argues that space is produced through the interaction of physical forms, conceptual representations, and lived experiences. This perspective underscores the relational nature of spaces and their role in shaping and being shaped by human activity. For care environments, this means that architectural design must consider not only the physical affordances of spaces but also the socio-political contexts in which they exist, ensuring that spaces actively contribute to equity, inclusion, and care.

Further extending this line of thought, Space Syntax theory, developed by British architects Hillier and Hanson (1984), provides a methodological approach to understanding how spatial configurations influence movement patterns, social interaction, and accessibility. Turner et al. (2001) expand on this by introducing visibility graphs, which map mutual visibility between points in space, enabling a detailed analysis of spatial relationships. These tools reveal how spatial layouts can encourage or inhibit movement and interaction, offering valuable insights for designing care environments. For instance, analyzing connectivity and integration within informal care nodes can reveal how spatial layouts support or hinder informal care practices. Integrating Space Syntax (Hillier & Hanson, 1984; Turner et al., 2001) with Affordance Theory (Gibson, 1986; Lanng & Jensen,

2022; Maier et al., 2009) and the Social Production of Space (Lefe-bvre, 2010) strengthens the argument that architecture mediates social relationships and care practices, offering a robust framework for designing inclusive and supportive care spaces.

The critique of *armature architecture* by South African Architect Nicholas Coetzer (2024), discussed in his book An Architecture of Care in South Africa: From Arts and Crafts to Other Progeny, offers a valuable example to explore the inherent influence of archi-tecture on its users and the challenges of attempting neutrality in design. Emerging as a response to apartheid's oppressive spatial practices, armature architecture aimed to create open, flexible, and inclusive spaces. This approach addresses challenges also obser-ved in Tarwewijk, such as the systemic inequalities reflected in the exploitative living conditions of Eastern European labor migrants (Klumpenaar, 2024). However, Coetzer argues that this approach, rooted in the desire to avoid overly prescriptive designs, often neglected the deeper socio-political dynamics it sought to address (Coetzer, 2024). By attempting to minimize its influence, architec-ture ultimately revealed its inescapable role in shaping behaviour and reinforcing or challenging systemic inequalities. This exam-ple highlights the tension between architectural neutrality and the unavoidable influence of design on human behaviour. It underscores how design decisions, even those aimed at flexibility and openness, carry inherent socio-political implications that shape and are sha-ped by the rituals and performances of everyday life.

Taken together, these perspectives illustrate that the architectu-ral context of care extends beyond functionality. It involves an ethical and relational approach to design, where spaces actively support the physical, emotional, and social dimensions of care.

METHODOLGY

This chapter introduces a methodology to explore the care networks in Tarwewijk. The methodology is underpinned by feminist epistemology, which critiques traditional notions of knowledge production that often overlook marginalized voices. Feminist epistemology, as explained by American philosopher Nancy Tuana (2017), emphasizes the situated nature of knowledge and the influence of social power structures on what is considered valid knowledge. This perspective guided the research design, particularly in selecting methods that prioritize participatory and context-sensitive approaches.

The methodology directly operationalizes the concept of care nodes introduced in the research, defining these as hubs where care practices, both formal and informal, are facilitated. This methodology is centered on these nodes to investigate their relational, spatial, and socio-political dynamics.

Analytical Guidelines

Analytical guidelines were developed to inform the analysis of care networks in Tarwewijk. Building on the theoretical insights from the Theoretical Framework, these guidelines transform theoretical concepts into actionable strategies for analysis. By connecting care ethics, care networks, and architectural design, it provides a structured approach to investigating the interplay between the built environment and informal care dynamics.

The analytical guidelines include the following considerations:

1. **Nodes of Care**: Identify and analyze informal and formal spaces where care is practiced, such as community centres, public parks, and neighbourhood hubs. (Davis, 2022; Milligan & Wiles, 2010; Rasmussen, 2017; Tronto & Fisher, 1990)
2. **Spatial Accessibility**: Evaluate the inclusivity and accessibility of care nodes, considering physical, social, and psychological barriers. (Hillier & Hanson, 1984; Lefebvre, 1991; Milligan & Wiles, 2010; Turner et al., 2001)
3. **Proximity and Connection**: Explore the role of spatial proximity in fostering care relationships and access to resources. (Milligan & Wiles, 2010; Rasmussen, 2017; Rutherford & Bowes, 2014)

4. **Relational Dynamics**: Assess how care nodes support or hinder interpersonal relationships and mutual support within care networks. (Davis, 2022; Kemp et al., 2013; Madanipour, 2021)

5. **Affordances**: Examine the design features that encourage or inhibit care practices, focusing on elements that invite interaction, rest, or assistance. (Gibson, 1986; Lanng & Jensen, 2022; Maier et al., 2009)

6. **Temporal Fluidity**: Consider how spaces adapt to evolving care needs and routines over time, ensuring they remain flexible and responsive. (Ho et al., 2021; Kemp et al., 2013; Rasmussen, 2017; Smits, 2024)

7. **Social Equity**: Investigate how spaces address or perpetuate systemic inequalities, particularly for marginalized groups. (Coetzer, 2024; Davis, 2022; Lefebvre, 1991)

8. **Ethical Spatial Practices**: Reflect on the socio-political implications of spaces, ensuring they align with principles of equity, inclusion, and support.(Coetzer, 2024; Davis, 2022; Lefebvre, 1991; Tronto & Fisher, 1990)

These analytical guidelines support both qualitative and spatial analyses by offering criteria to evaluate care practices and their spatial manifestations, providing a structured approach to interpreting the collected data.

Data collection

To provide a comprehensive understanding of the relational and spatial dynamics of care in the neighbourhood, a mixed-methods approach was employed, combining qualitative and spatial analysis. This methodology, conducted during the fall and winter of 2024, included semi-structured interviews, participant observations, and spatial mapping. The details of the data collection process are documented in the fieldwork booklet, which is included as Appendix 1.

The semi-structured interviews involved twenty-four residents of Tarwewijk, conducted outside a local supermarket to ensure accessibility and informality. Key questions included: "Where do you feel at home in the neighbourhood?", "Where do you meet other people in the neighbourhood?", and "When, where, or how have you helped someone?" These questions were designed to uncover the informal care practices and spaces where care interactions occur. The choice of semi-structured interviews allowed for capturing diverse perspectives and lived experiences, ensuring that the voices of Tarwewijk residents were central to the analysis.

In addition to interviews, site visits were conducted to three care nodes in Tarwewijk. These nodes, though differing in their principles and activities, share the common goal of providing informal care. This method allowed for direct engagement and situating observations within their specific social and spatial contexts. The observations focused on spatial configurations, usage patterns, accessibility, social relations, and the interconnectedness of care nodes. By foregrounding lived experiences and local interactions, this approach reflects the commitment to understanding knowledge as relational and embedded within everyday practices.

Spatial mapping of care nodes in the Tarwewijk was carried out using information on Google Maps (Google, n.d.) and supported by secondary sources such as studies done in order of the Municipality of Rotterdam (e.g. Stiching Wijkcollectie & Veldacademie, 2022).

For the space syntax analysis of the spaces of care nodes, software DepthmapX (depthmapX development team, 2017) was used. These method provided visual representations. The analysis considered connectivity, movement patterns, and visibility to better understand the spatial integration of care networks.

CHAPTER 4

HOW CAN SPATIAL MAPPING OF EXISTING CARE NETWORKS REVEAL THE STRENGTHS AND WEAKNESSES OF CARE NODES WITHIN URBAN NEIGHBOURHOODS?

This chapter examines care networks in Tarwewijk, focusing on how informal and formal care practices are distributed and supported. Using insights from semi-structured interviews, site visits to care nodes, and spatial mapping, the analysis identifies patterns of social interaction, gaps in care infrastructure, and barriers to community engagement.

Guided by the question, *how can spatial mapping of existing care networks reveal the strengths and weaknesses of care nodes within urban neighbourhoods?*, the chapter explores the social and spatial dynamics of care nodes. Findings from interviews and site visits highlight relational dynamics, while the mapping exercise reveals the distribution and accessibility of care nodes. These insights lay the groundwork for the spatial analysis in Chapter 5.

Insights from Street Interviews in Tarwewijk

Importance of Personal Relationships in Informal Care
The interviews conducted in Tarwewijk highlight a complex interplay between social cohesion, feelings of safety, and the informal care networks in the neighbourhood (Fieldwork Booklet, Semi-structured Interviews). A key theme that emerged was the importance of personal relationships in fostering informal care. Many residents highlighted how direct neighbours were often a source of support, helping with tasks such as childcare or minor household repairs. However, the level of engagement varied significantly across the neighbourhood, with stronger neighbourly bonds reported in the northern part of Tarwewijk compared to the southern part, where social isolation was more prevalent. These findings align with Rutherford and Bowes' (2014) emphasis on the socio-economic importance of informal care networks, which often fill gaps left by formal systems. Physical proximity was also a key factor, reflecting Milligan and Wiles' (2010) concept of "landscapes of care," where spatial closeness fosters mutual support.

This pattern of social interaction limited to direct neighbours or specific institutions suggests a fragmented social fabric, with isolated pockets of interaction rather than a cohesive network.

Role of Public Spaces in Informal Interactions
Public spaces, such as playgrounds and community centres, were frequently mentioned as sites of informal interactions. These spaces served as meeting points for parents and children, where conversations and small acts of care, such as watching over someone else's child, occurred. This aligns with Davis (2022) aspirational

perspective of urban places serving as 'places of care'.

The low quality of the public spaces was also mentioned as a barrier for using the spaces and thus hinder social interaction (Fieldwork Booklet, Semi-structured Interviews). As Madanipour (2021) notes, urban spaces often fail to meet these needs due to inadequate maintenance and exclusionary practices, which was evident in residents' critiques of the poor quality of Tarwewijk's public spaces.

Safety Concerns and Their Impact on Care Nodes

Safety concerns also emerged as a recurring issue. Poorly lit or under-maintained areas, particularly in the southern sections of Tarwewijk, were often avoided by residents, limiting the potential of care nodes. Residents who felt safer tended to cite specific spaces like workplaces, religious institutions, or social hubs as areas where they experienced a sense of belonging, rather than the neighbourhood as a whole. This could suggest that residents who were more engaged in community activities felt safer as a result of their involvement.

Acts of Care and Reluctance to Engage

Acts of care, such as helping neighbours or engaging in community initiatives, were generally limited. Some residents recounted specific instances of assistance, such as lending tools, calling the police for an elderly neighbour, or helping with groceries. However, many interviewees expressed reluctance to engage due to mistrust or a lack of connection with others. This reluctance indicates a potential barrier to fostering a robust care network in the neighbourhood.

Barriers to Community Engagement

Several barriers to community engagement were noted, including language differences, cultural divides, and socioeconomic disparities. For example, one participant highlighted the challenges faced by parents of children with disabilities, pointing to the need for inclusive spaces and programs. Additionally, the lack of green spaces and appealing activities for young adults and older children was frequently cited as a limitation, reducing opportunities for natural interactions and collective care. These findings align with observations by Burgers and Zuijderwijk (2016), who highlighted the challenges of fostering a sense of belonging in heterogeneous urban neighbourhoods. They noted that language barriers, ethnic segregation, and a lack of trust in public spaces often hinder efforts to create cohesive communities, emphasizing the need for targe-

ted interventions to bridge these gaps. Similarly, the Rapportage Behoeftes Jongeren Tarwewijk (2024) underscored the necessity for inclusive and youth-friendly spaces, noting that a lack of suitable activities for older children and young adults contributes to social disconnection and limited community participation.

Spatial Dynamics of Interactions

In addition to conducting interviews, attendees were asked to point out on a map where they felt the most at home (in places outside of their homes), where they met people, and where they helped others (figure 2) This exercise provided valuable insights into the spatial dynamics of care networks in Tarwewijk. The resulting map revealed notable clustering around certain themes, particularly within close proximity to participants' homes.

The map revealed that locations where participants met others (blue) frequently overlapped with places where they helped others (yellow), such as playgrounds, community centres, and specific streets. These areas formed localized clusters, highlighting the importance of shared spaces in fostering both interactions and acts of care (Davis, 2022).

In contrast, places where participants felt most at home (pink) were often more isolated from these meeting and helping nodes. This spatial separation suggests that while community spaces
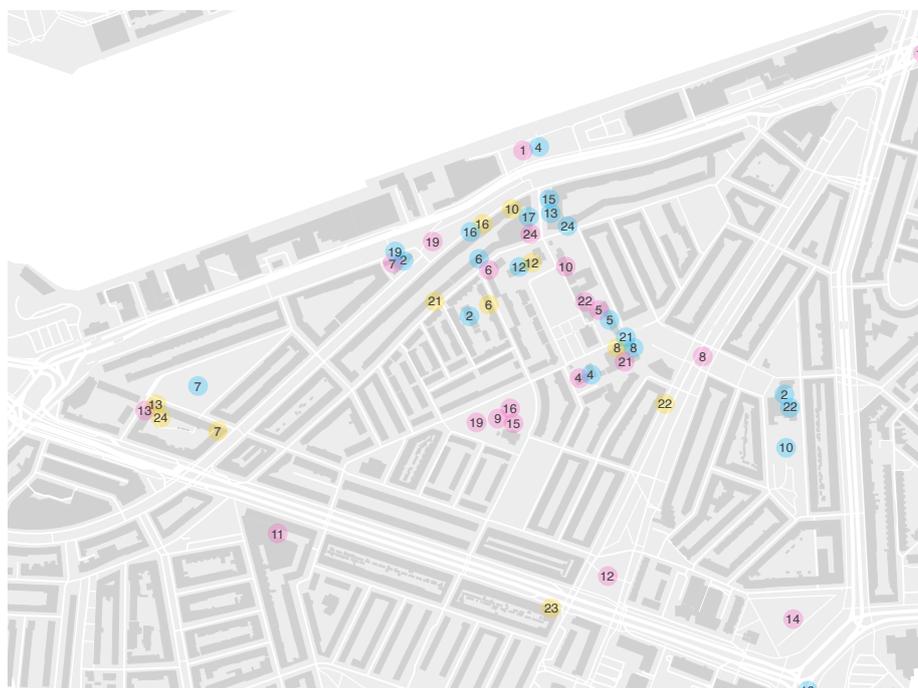
Fig. 2 Visualisation of location pointed out by participants of the interviews.

foster social interactions and acts of care, they do not always provide the personal comfort and emotional connection that residents associate with feeling "at home." This highlights a potential gap in the integration of spaces that serve both personal and communal needs, emphasizing the importance of designing environments that can cater to both emotional attachment and social functionality.

Insights from care node visits

The visits to care nodes in Tarwewijk provided valuable insights into how these spaces foster informal and formal care networks. This section focuses on the social roles and community dynamics observed at three care nodes: a creative community gathering space, a cooking initiative, and a mosque that doubles as a community hub. Each node demonstrates unique approaches to fostering social connections and mutual support, highlighting their importance within the neighbourhood's care networks.

- *The creative community gathering space* hosts activities such as collaborative art projects, shared meals, and a 'free store,' offering opportunities for interaction and mutual aid among participants from diverse backgrounds.
- *The cooking initiative*, based in a shared kitchen within a repurposed school building, addresses material needs by providing affordable meals and occasionally distributing secondhand goods, while also fostering connections among volunteers and residents.
- *The mosque*, operating as a community centre, combines religious functions with social activities, serving as a vital hub for building social cohesion.

This chapter examines the social and relational dynamics at these care nodes, with a particular focus on how they facilitate informal care practices. Their spatial characteristics and architectural affordances, which play a key role in shaping care interactions, will be analyzed in detail in Chapter 5.

The Role of Community-Driven Initiatives

Care nodes such as the creative community gathering space exemplify how grassroots initiatives foster a sense of belonging and mutual care. Activities like collaborative art projects encourage self-expression (Fieldwork Booklet, Participant Observations, November 1, 2024). For example, during one gathering, participants collaboratively repaired clothing, sharing sewing techniques

and tools, fostering mutual assistance and support (Fieldwork Booklet, Participant Observations, November 22, 2024). These intimate interactions highlight the value of creating environments that encourage meaningful exchanges of support. Additionally, a notable feature of this care node is the presence of a 'free store,' where participants can donate and take secondhand items, such as clothes and household goods (Fieldwork Booklet, Participant Observations, November 22, 2024). This fosters a culture of sharing and mutual assistance, further strengthening the community ties.

The cooking initiative highlights the importance of community-driven care in addressing local needs. The meals prepared address essential needs for nourishment among residents facing financial difficulties, yet the initiative's impact extends beyond food distribution. By occasionally offering secondhand clothing and household items, the program addresses broader material needs. Furthermore, the interactions among volunteers and participants create opportunities for informal social support.

The Interplay of Formal and Informal Care

Many care nodes in Tarwewijk function at the intersection of formal and informal care. The cooking initiative, for instance, is supported by a small government subsidy but operates with a personal and informal approach. Similarly, the mosque, while providing structured welfare projects, also acts as a gathering space for informal social support (Fieldwork Booklet, Participant Observations, December 13, 2024). This blending of formal and informal elements demonstrates how formal structures and informal initiatives can complement each other to address diverse community needs effectively.

The Importance of Shared Spaces

Shared spaces play a vital role in fostering connections and supporting care practices. The creative community gatherings illustrate this, with a central communal table, creating an environment where participants can form social bonds. Beyond structured activities, the availability of shared spaces encourages informal interactions.

In contrast, the cooking initiative, which is limited to a takeaway model, lacks such a communal meeting space. This absence diminishes opportunities for participants to engage with one another and build connections (Fieldwork Booklet, Participant Observations, December 11, 2024).

Barriers to Participation and Care

Several challenges to fostering care networks emerged during

the visits. The difficulty in communicating the existence and accessibility of care activities limits participation, as noted in discussions about the underuse of well-equipped facilities in the neighbourhood, like the kitchen in the community centre Millinxhuis (Fieldwork Booklet, Participant Observations, November 29, 2024).

The Role of Food in Care Nodes

Food consistently emerged as a important element across the care nodes, regardless of whether it was the primary focus of the initiative. In the creative community gathering space, shared meals or snacks often accompanied activities, creating opportunities for participants to bond and engage informally. The cooking initiative highlighted the essential role of food as a direct form of care, providing nutritious meals to residents in financial need (Fieldwork Booklet, Participant Observations, November 20, 2024). Additionally, among the volunteers, food was also a medium for fostering connections, as seen when one brought homemade desserts to share with others, reinforcing bonds within the group (Fieldwork booklet, Participant Observations, December 11, 2024). The absence of a communal dining space reduces opportunities for participants to meet and possibly build social connections. At the mosque, food also played an integral role in community gatherings, such as festive meals and shared Iftar events during Ramadan, fostering a sense of unity and mutual support.

These observations emphasize that food is not merely a functional necessity but a powerful tool for building relationships and reinforcing care networks. Farmer et al. (2017), in their systematic review, explored the psychosocial benefits of engaging in group cooking activities. They identified enhanced socialization, improved self-esteem, and reduced isolation as key outcomes, highlighting how the act of preparing and sharing meals can foster meaningful connections. Their findings suggest that such activities create opportunities for participants to share knowledge, offer support, and build community, making them a valuable component of initiatives aimed at strengthening social ties.

These insights suggest that integrating food-related programs and communal cooking spaces into care nodes holds significant potential. By embracing the social and emotional dimensions of shared food activities, such initiatives can create environments that foster community bonds and enhance informal care networks.

Mapping of Care Nodes

Building on insights from the street interviews and care node visits, a spatial analysis was conducted to map care nodes across Tarwewijk (Figure 3). The mapping categorizes these nodes into formal and informal care spaces. Formal care nodes include GP practices, health centres, and schools, while informal care nodes consist of small local supermarkets, community centres, playgrounds, churches, mosques, and creative initiatives. Together, these nodes represent the broader landscape of caregiving within the neigh-

Fig. 3 Visualisation of the care network and care nodes in Tarwewijk.

Street Interview Node

Visbility

100m Radius

Informal Care Node
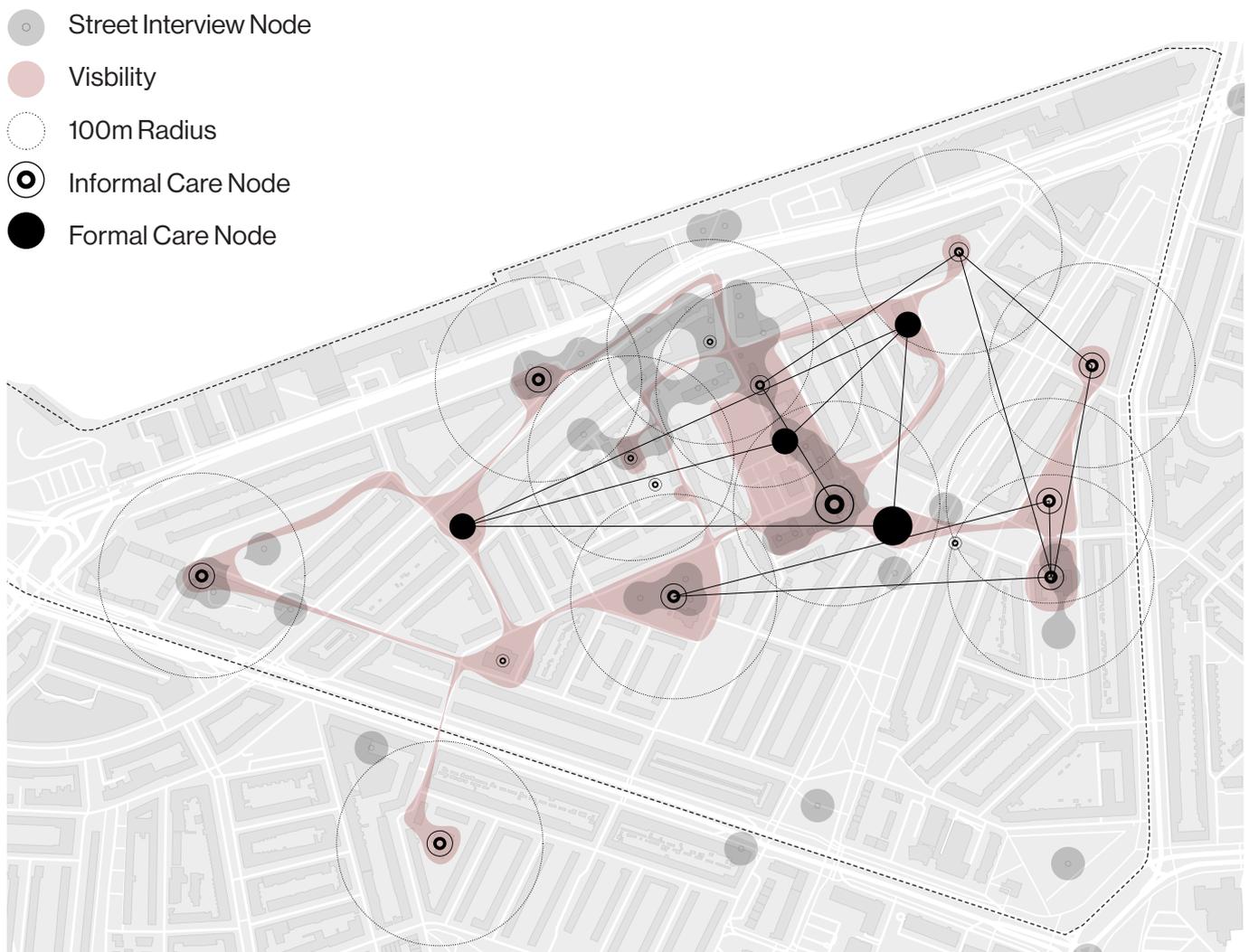
Formal Care Node

bourhood.

When considering only the formal care nodes in Tarwewijk, the neighbourhood appears to have limited care infrastructure. However, the inclusion of informal care nodes provides a much richer perspective on the care networks. Despite this, significant differences remain, particularly in the southern part of the neighbourhood, where care nodes, both formal and informal, are limited. These findings align with insights from the mapping exercise conducted during the street interviews, which highlighted similar gaps in care provision.

What makes these informal care spaces particularly significant is their ability to foster relationships that often lead to deeper, mutual care connections. Relationships formed at these informal care nodes frequently extend beyond the immediate interactions, resulting in ongoing care networks and reciprocity (Fieldwork Booklet, Participant Observations). For example, a small Bulgarian supermarket in Tarwewijk serves as a key site for relational dynamics by enabling informal interactions alongside structured activities, such as a consultation hour specifically for Bulgarian-speaking residents in need of assistance (Stiching Wijkcollectie & Veldacademie, 2022). This combination of community interaction and targeted support exemplifies the dual role that informal care nodes can play in attending localized needs not addressed by formal systems (Rutherford & Bowes, 2014).

Accessibility and visibility also emerged as challenges for these informal care nodes. Locations with greater visibility, such as those along bigger streets or open urban spaces, appeared to be used more frequently. However, even visible locations face barriers, as residents often rely on word of mouth to learn about these initiatives or activities, suggesting a lack of effective communication strategies (Fieldwork Booklet, Participant Observations, November 29, 2024).

Conclusion

This chapter has explored the strengths and weaknesses of care networks in Tarwewijk, drawing from interviews, site visits, and spatial mapping of care nodes. The findings reveal a fragmented social fabric, with informal care primarily concentrated around direct neighbours or specific community spaces. While public spaces, such as playgrounds and community centres, foster informal interactions, their potential is often constrained by poor maintenance, safety concerns, and cultural divides. This highlights the need for better-designed and maintained public spaces to enhance social cohesion and care networks.

The mapping exercise emphasized the critical role of informal

care nodes—such as the creative gathering space, the cooking initiative, and the mosque—in providing relational and material support. These nodes operate as hubs where social bonds are formed and strengthened, often compensating for the lack of formal care infrastructure in the neighbourhood. However, the distribution of care nodes is uneven, with significant gaps in underserved areas like the southern sections of Tarwewijk.

These insights underscore the importance of integrating care into urban planning and design. Addressing barriers like accessibility, visibility, and safety in public spaces could strengthen the neighbourhood's care networks and foster a more inclusive community. This chapter also highlights the interplay between relational dynamics and spatial configurations, setting the stage for the detailed analysis of care nodes' architectural characteristics in Chapter 5.

CHAPTER 5

WHAT ROLE DO ARCHITECTURAL CHARACTERISTICS PLAY IN SHAPING CARE NETWORK NODES IN URBAN NEIGHBOURHOODS?

Building on the findings from Chapter 4, which explored the social and relational dynamics of care networks in Tarwewijk, this chapter examines the spatial characteristics of key care nodes. While the previous chapter highlighted how spaces like community centres, religious institutions, and informal gathering places facilitate care practices, this chapter focuses on how their architectural features, such as visibility, accessibility, and spatial configurations, shape these interactions.

The analysis centers on two care nodes: a creative community gathering space and a cooking initiative. These spaces were introduced in Chapter 4 for their role in fostering care networks through activities like collaborative projects, food distribution, and community events. Here, the emphasis shifts to the spatial design of these nodes, investigating how elements like layout, circulation, and affordances enable or constrain care practices.

By applying spatial theories such as affordance theory (Gibson, 1986; Maier et al., 2009), space syntax (Hillier & Hanson, 1984), and the production of space (Lefebvre, 1991), this chapter demonstrates how architecture mediates social relationships and care interactions. Tools like visibility graphs and movement maps provide a quantitative lens to complement qualitative observations from fieldwork.

This chapter seeks to answer the question: *What role do architectural characteristics play in shaping care network nodes in urban neighbourhoods?*

Analysis of the Creative Care Network Node

Introduction to the Node
The creative care network node analyzed in this section serves as a significant hub for informal care and community interaction within Tarwewijk. Positioned in a shared space connected to a senior living complex, this node facilitates diverse activities that cater to the wider community and also the residents of the senior living complex. As a creative hub, it draws participants from varied backgrounds, facilitating interactions among individuals of different ages, ethnicities, and socio-economic statuses. Every Monday and Friday, the space is open for the community, offering coffee, tea, and a unique tradition called 'group soup' every Friday, made from leftover vegetables brought by participants.

Description and Key Features
The creative care network node consists of a central communal space surrounded by smaller, semi-private zones, supporting a range

of functions from group activities to individual tasks. The isometric drawing (figure 4) illustrates the space's key architectural and functional features. Prominent elements include the central table with seating, the bar where coffee, tea, and soup are served, and the table and clothing rack, also called the 'weggeefwinkel', a space where people can donate and take items freely (figure 5). These features are central to the social dynamic of the space.

Analysis

The spatial configuration of the care network node reflects a dynamic interplay between visibility, accessibility, and affordances that shape movement, interaction, and intimacy within the space. Insights from a movement map (figure 6) a nd a Visibility Graph Analysis (VGA) (figure 7), created using DepthmapX software (depthmapX development team, 2017), complement observations made during site visits. These tools, as discussed by Turner et al. (2001), provide a deeper understanding of how spatial layouts influence interaction and accessibility, adding a quantitative dimension to the qualitative fieldwork findings.

Centrality and Visibility

The 'weggeefwinkel', positioned near the entrance, is an element that acts as the first point of engagement for visitors (figure 5). It naturally draws attention as individuals stop to browse or donate, establishing it as an informal gathering spot. While the central table appears to be less visible according to the VGA (figure 7), its function as the primary site for group activities and coffee breaks makes it a central hub of activity. This suggests that visibility's role in fostering interaction depends on both the spatial layout and the social meaning attached to the furniture. The table's dynamic role, despite moderate visibility, ensures high interaction levels, demonstrating how functional affordances can outweigh visibility in fostering engagement.

Intimacy and Interaction

The varying levels of visibility (figure 7) within the node provide distinct affordances for social interaction. Peripheral spaces, such as a secluded corner of the space, afford more intimate and private interactions. An example from the fieldwork highlights this affordance. A woman offered to thread my eyebrows. She chose a low-visibility corner of the room to set up a chair and her supplies and asked me to come sit. This illustrates how such secluded areas support acts requiring privacy and comfort. Without this low-visibility corner, the care practice (threading of eyebrows) could only be done in the high

Fig. 4 (above) Isometric drawing of the Creative Care Network Node.

Fig. 5 (below) Isometric drawing of the "weggeefwinkel".
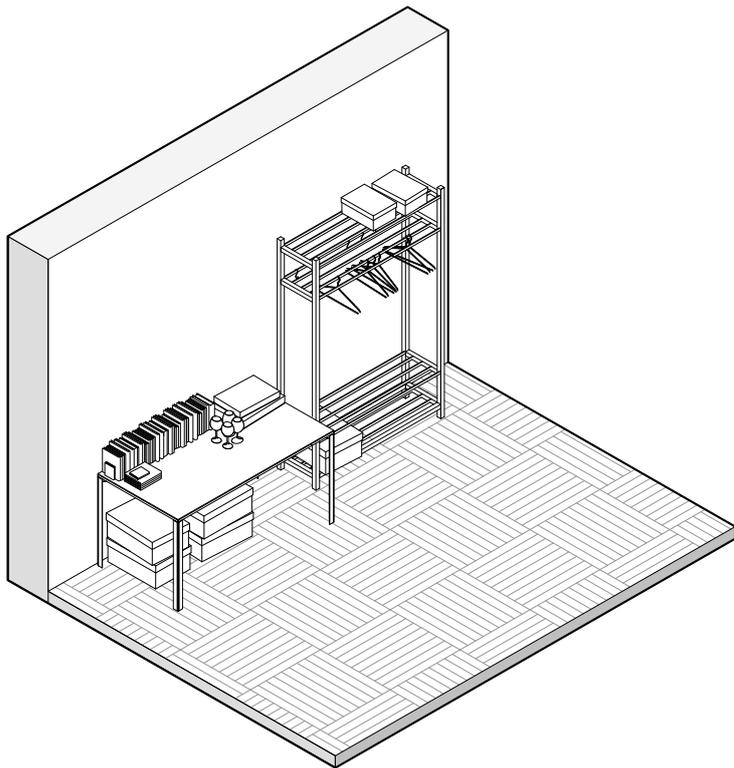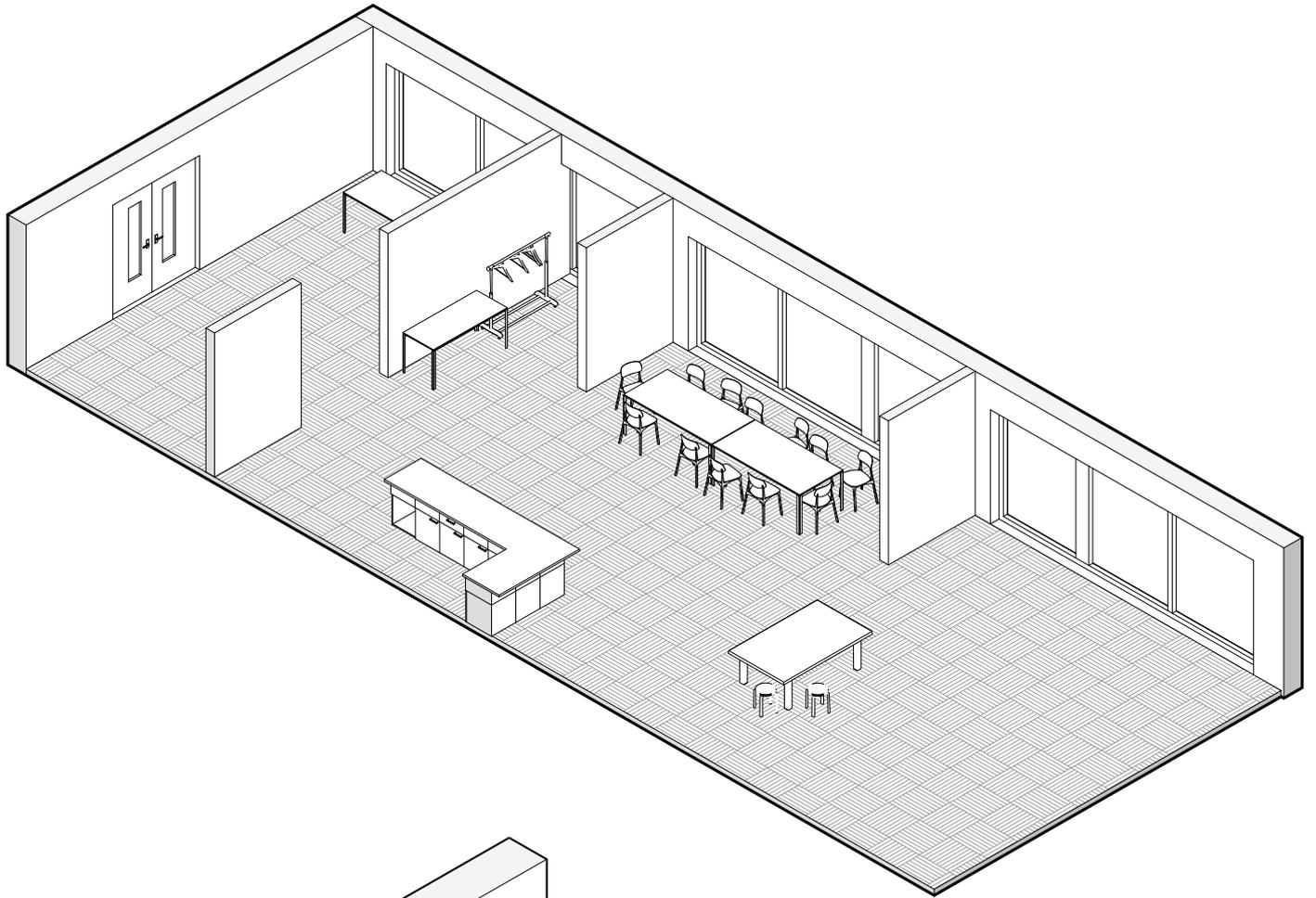
visibility open space and this would feel the opposite of comforting, exposed. This organic interaction underscores the value of peripheral spaces for fostering personal connections and care activities. This demonstrates that low-visibility spaces are not inherently negative but instead provide unique affordances for sensitive or personal engagements.

Conversely, the central table, with its open seating arrangement, invites communal participation and collaboration. However,the table's size and group dynamic may create a barrier for newcomers, making smaller seating clusters a potential intervention to lower social thresholds and enhance inclusivity.

Power Dynamics and Spatial Behaviour

Although the node is organized to foster community-driven interactions, the role of the organizers introduces subtle power dynamics. Their choice to sit at the bar, driven by their constant organizational responsibilities rather than personal preference, visually and socially distinguishes them from participants sitting at the central table. This reflects an unintended hierarchy, despite their intention to remain equal members of the community. Markus (1993) delves into how architectural settings can unintentionally enforce social hierarchies by shaping behaviours and interactions. In this space, the positioning of organizers at the bar, driven by their logistical roles, creates a visible distinction from participants at the central table. This spatial arrangement subtly reinforces a social dynamic where organizers, despite their intentions to foster equality, are perceived as distinct authority figures. The architectural design of such care nodes, as Markus (1993) suggests, can inadvertently embed power dynamics, influencing both the perception and interaction patterns within the community.

Social and Cultural Symbolism

The 'weggeefwinkel' embodies a dual role: fostering resource-sharing while also reflecting socio-economic disparities within the community. Participants who donate versus those who take items may perceive different roles within the space, introducing potential social differences or divides. Moving the 'weggeefwinkel' to a more private location could mitigate these dynamics, supporting dignity and equality among users. Additionally, the presence of handmade objects and creative outputs prominently displayed reinforces the cultural significance of the space, serving as tangible expressions of community identity. Cushing & Miller (2020) argue that such intentional design elements not only enhance inclusivity but also create a sense of belonging and cultural cohesion.

Fig. 6 (above) Movement map of the Creative Care Network Node.

Fig. 7 (below) VGA of the the Creative Care Network Node. From most visible (white) to least visible (black).
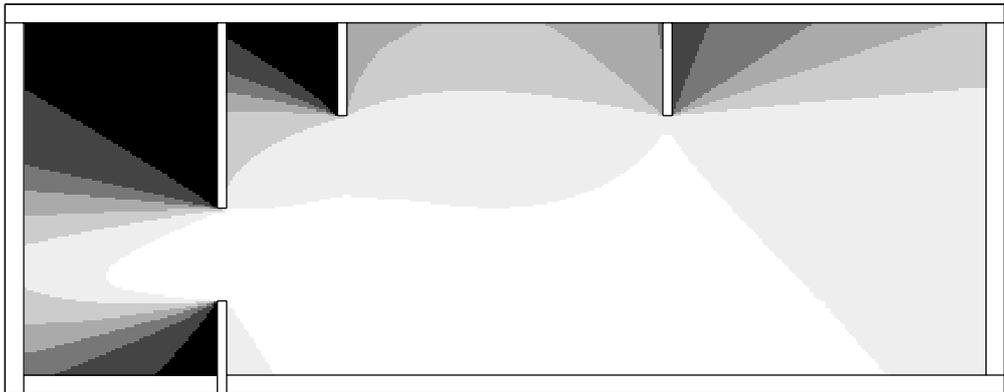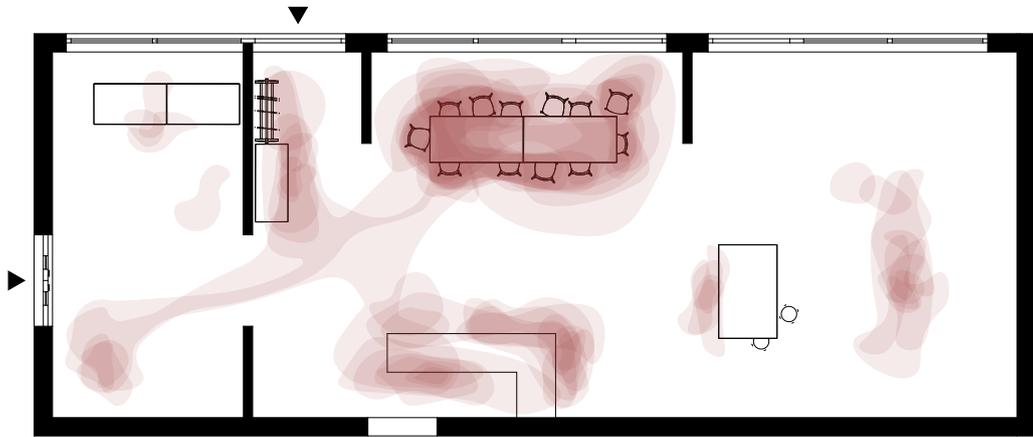
Analysis of the Food Care Network Node

Introduction to the Node

The food care network node analyzed in this section is centered around a community-driven cooking initiative located in a former school building, which now serves as a hub for creative and social activities. This former school, a national monument, currently accommodates artists, dance studios, and community-oriented initiatives in its repurposed classrooms. One of these classrooms has been transformed into a shared kitchen.

This care node primarily supports residents facing financial difficulties by offering affordable, nutritious meals prepared by a small team of volunteers, coordinated by a dedicated organizer. Twice a week, meals are distributed to approximately 35 individuals and families, with an additional day reserved for preparing meals for a girls' dance club. The volunteer team, diverse in background and experience, includes residents who contribute their time and skills. While the setup currently focuses on takeaway meals, the initiative aspires to have a communal dining space to encourage social connections.

Description and Key Features

The food care network node consists of the kitchen and the entryway of the school building. The two isometric drawings (figure 8 & 9) illustrates the space's key architectural and functional features. The kitchen serves as the central place for food preparation, featuring two kitchen counters equipped with sinks and portable induction cooktops. A main table in the center is used for most of the cutting and assembling tasks.

The entryway, a transitional space that serves as the main entrance the building, doubles as the site for meal distribution. During distribution times, tables are set up here to accommodate both food handouts and a clothing rack with donated items, further enhancing its role as a community resource.

Fig. 8 (above) Isometric drawing of the kitchen of the Food Care Network Node.

Fig. 9 (below) Isometric drawing of the entryway of the Food Care Network Node.

Analysis
Centrality and Visibility

The VGA (figure 11) reveals that most central and visible area of the kitchen space is the central table, is aligning with its function as the primary workspace, where most cutting and assembling occurs. However, the movement map suggests inefficiencies in circulation patterns, particularly during busy periods when the space between the kitchen counters becomes congested. This congestion ham-

pers workflow and creates moments of tension among volunteers, highlighting the need for spatial reconfiguration that better support simultaneous tasks.

During meal distribution, the table is strategically located in a highly visible area of the entryway (figure 11), ensuring that recipients can easily spot the meals upon entering. Similarly, the clothing rack is positioned near the stairwell, maximizing accessibility for visitors. While this placement prioritizes efficiency, allowing people to quickly collect meals and leave, it limits opportunities for social engagement that could arise in a more welcoming and interactive setting.

Affordances for Care Practices
The kitchen counters, portable induction cooktops, and central table offer clear affordances for collaborative cooking. These features not only enable efficient meal preparation but also foster informal interactions, reinforcing the social bonds among volunteers. The entryway, primarily serving logistical needs, is an uninviting and cold space, largely due to the open door to the outside. Its small size limits lingering, as staying too long risks crowding the area. These conditions hinder opportunities for meaningful social connection, which could otherwise be fostered in a more accommodating and thoughtfully designed environment. Rather than affording care, the current setup discourages prolonged engagement, emphasizing functionality at the cost of community interaction.

Challenges of Shared Spaces
The kitchen's shared nature introduces both opportunities and constraints. While the kitchen is well-equipped, its location and limited visibility for other groups using the building inhibit cross-group interactions. The lack of shared schedules or communication between different users results in conflicts over cleanliness and organization. This physical and social disconnect prevents the kitchen from fully serving as a communal space.

Future Potential
The aspiration of the volunteers to expand the node to include a communal dining space reflects its potential to foster deeper community connections. The analysis suggests that small interventions, such as rearranging the entryway to accommodate a temporary seating area or introducing more structured organization within the kitchen, could enhance the node's capacity to support both care practices and social cohesion.

Fig. 10 (above) Movement maps of the Food Care Network Node.

Fig. 11 (below) VGA's of the the Food Care Network Node. From most visible (white) to least visible (black).
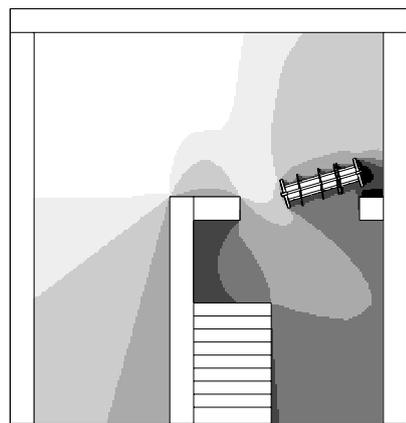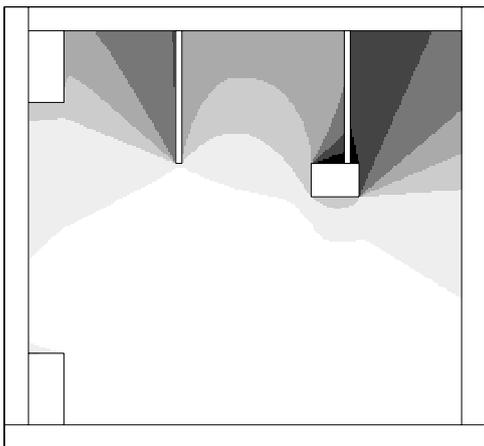
Conclusion

This chapter analyzed the spatial characteristics of two care nodes in Tarwewijk, highlighting how architectural features shape their functionality and inclusivity. The creative care node demonstrated how central communal areas and semi-private zones support diverse social interactions and foster a sense of community. However, subtle power dynamics and spatial barriers, such as the positioning of organizers, revealed opportunities for improved inclusivity.

The cooking initiative revealed both the potential and limitations of its spatial layout. While the kitchen's central table and entryway support practical care practices, issues like congestion and the lack of a communal dining area limit opportunities for deeper social engagement. These findings emphasize the importance of spatial configurations that balance functionality with opportunities for meaningful interaction.

Overall, the analysis underscores the critical role of spatial design in enabling care networks. Features such as visibility, accessibility, and affordances for interaction directly influence how spaces foster relationships and provide care. By addressing these spatial elements, care nodes can better meet the needs of their users and promote stronger, more inclusive care networks. The insights from this chapter inform the design guidelines proposed in Chapter 6, which aim to enhance the effectiveness and inclusivity of care spaces.

CONCLUSION

Architects care and architects should care. This research has explored the role of care networks and care nodes in urban neighbourhoods, focusing on Tarwewijk, Rotterdam, as a case study. Through the integration of care ethics, qualitative fieldwork, and spatial analysis, the study has revealed how social and spatial dynamics shape care practices and interactions, as well as the architectural characteristics that support or hinder these practices.

The first research question addressed how spatial mapping can reveal the strengths and weaknesses of care networks. Findings highlighted the fragmented nature of care in Tarwewijk, with strong reliance on immediate neighbours and key care nodes such as the creative gathering space and cooking initiative. These nodes act as vital hubs for fostering social cohesion and mutual support, compensating for gaps in formal care systems. However, the uneven distribution of care nodes, particularly in the southern parts of the neighbourhood, underscores the need for targeted interventions to address spatial inequities.

The second research question focused on the role of architectural characteristics in shaping care nodes. The analysis demonstrated that features such as visibility, accessibility, spatial configurations, and resource-sharing significantly influence care practices. Activities like donating and exchanging goods at the "free store" foster community bonds, while food-sharing and meal preparation further strengthen care relationships. Safety also emerged as a critical factor, with poorly lit or neglected spaces deterring use and limiting the potential of care nodes. Finally, the blending of formal and informal care practices, such as government-supported initiatives run with a personal, informal approach, was found to be an effective strategy for addressing diverse community needs.

Design Guidelines

Based on these findings, the following design guidelines, categorized by scale, are proposed to enhance the effectiveness and inclusivity of care nodes. The scales—***Urban Scale***, ***Care Node Scale***, and ***Design Features Scale***—organize the recommendations from neighbourhood-wide interventions to specific design details, ensuring a holistic approach to fostering care networks.

Urban Scale

1. **<u>Address Spatial Inequities</u>**: Target underserved areas by establishing care nodes tailored to the specific needs of local residents, reducing barriers to access.
2. **<u>Promote Accessibility</u>**: Address physical, social, and linguistic barriers by providing safe and inclusive pathways, clear signage, and multilingual materials to encourage diverse participation.
3. **<u>Enhance Visibility</u>**: Locate care nodes in central, visible areas to attract users and facilitate spontaneous interactions, while ensuring options for privacy to support more personal care practices.

Care Node Scale

4. **<u>Foster Interaction</u>**: Design communal areas, such as central tables or flexible seating, to encourage informal interactions. Incorporate smaller, modular spaces to lower social thresholds for newcomers and foster inclusivity.
5. **<u>Support Privacy</u>**: Include semi-private or secluded zones within care nodes to accommodate sensitive activities, such as one-on-one care practices or private conversations.
6. **<u>Leverage Food as a Connector</u>**: Incorporate shared kitchens, dining areas, or spaces for communal meals to foster relationships and strengthen social bonds.
7. **<u>Bridge Formal and Informal Care</u>**: Encourage hybrid models that combine formal structures (e.g., subsidies or professional services) with informal, community-driven approaches to meet diverse needs effectively.

Design Feature Scale

8. **<u>Integrate Resource-Sharing</u>**: Provide dedicated spaces for donating, exchanging, or borrowing goods, such as free stores, clothing racks, or shared tools, to foster community reciprocity and mutual aid.
9. **<u>Prioritize Safety</u>**: Design safe and welcoming environments by improving lighting, maintaining cleanliness, and creating open sightlines to enhance the sense of security and encourage use.
10. **<u>Ensure Flexibility and Adaptability</u>**: Design spaces that can evolve over time to accommodate changing care needs, ensuring their long-term relevance.
11. **<u>Foster Community Ownership</u>**: Actively involve local residents in the design, management, and programming of care nodes to ensure that spaces reflect their needs and build a sense of belonging.

EQUITY

ACCESSIBILITY

VISIBILITY

INTERACTION

PRIVACY

FOOD

NETWORKS

SHARING

SAFETY

FLEXIBILITY
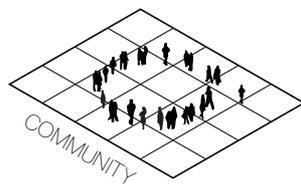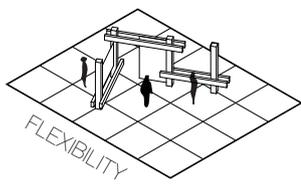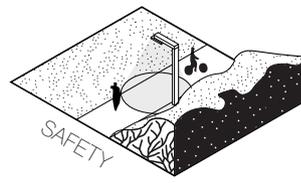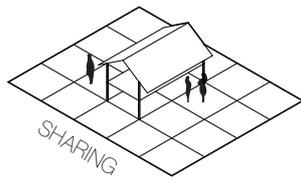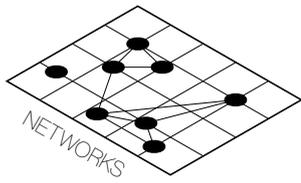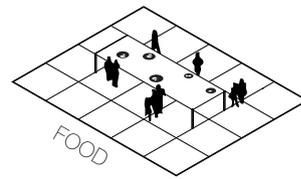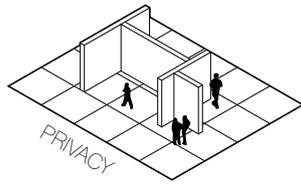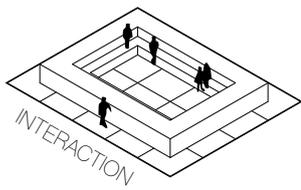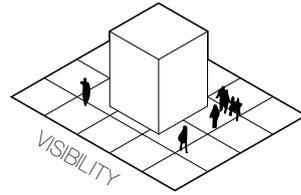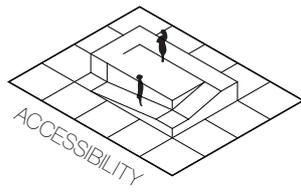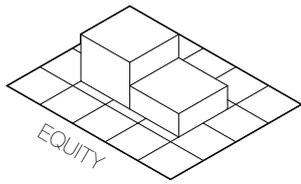
COMMUNITY

The concept of care challenges architects and urban planners to go beyond functional solutions and design spaces that nurture relationships and community connections. By embedding care into the physical environment, architects can contribute to more equitable, inclusive, and supportive urban neighbourhoods. The design guidelines presented here aim to help architects and planners translate care ethics into actionable strategies, bridging the gap between social and spatial dimensions of care.

Ultimately, architects care by designing spaces that allow communities to thrive. Through intentional, thoughtful design, care nodes can become the heart of urban neighbourhoods, fostering trust, reciprocity, and well-being.

BIBLIOGRAPHY

Bates, C., Imrie, R., & Kullman, K. (Eds.). (2017). *Care and design: Bodies, buildings, cities*. Wiley Blackwell. https://search.ebscohost.com/login. aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=1362331

Benedikt, M. L. (1979). To Take Hold of Space: Isovists and Isovist Fields. *Environment and Planning B: Planning and Design*, *6*(1), 47–65. https://doi.org/10.1068/b060047

Bernal, D. M. (2024). Storying Stories: Socio-spatial practices and their meaning. In *Repository: 49 Methods and Assignments for Writing Urban Places* (pp. 166–169). TU Delft OPEN Books.

Bille, M., & Schwabe, S. (2023). *The Atmospheric City*. Routledge. https://doi.org/10.4324/9781003379188

Boys, J. (2016). Architecture, place and the 'care-full' design of everyday life. In C. Bates, R. Imrie, & K. Kullman (Eds.), *Care and Design* (pp. 155–177). John Wiley & Sons. https://onlinelibrary.wiley.com/doi/10.1002/9781119053484.ch9

Budde, C., & Pepchinski, M. (Eds.). (2022). *Women Architects and Politics: Intersections between Gender, Power Structures and Architecture in the Long 20th Century* (p. 290 Pages). transcript Verlag.

Burgers, J., & Zuijderwijk, L. (2016). At Home at the Neighborhood Square: Creating a sense of belonging in a heterogeneous city. *Home Cultures*, *13*(2), 101–121. https://doi.org/10.1080/17406315.2016.1190582

CBS. (2020, August 19). *Kernprognose 2019-2060: 19 miljoen inwoners in 2039* [Webpage]. Centraal Bureau voor de Statistiek. https://www.cbs.nl/nl-nl/longread/statistische-trends/2019/kernprognose-2019-2060-19-miljoen-inwoners-in-2039?onepage=true

Chatzidakis, A., Hakim, J., Littler, J., Rottenberg, C., & Segal, L. (2020). *The Care Manifesto: The Politics of Interdependence*. Verso. https://doi.org/10.1007/978-3-031-14608-4

Chaudhari, L. S. (2009). Mapping health care networks in Trinidad integrating

ethnographic data and GIS. *International Cartographic Conference Proceedings*.

Coetzer, N. (2024). *An Architecture of Care in South Africa: From Arts and Crafts to Other Progeny*. Routledge. https://doi.org/10.4324/9780367461560

Cushing, D. F., & Miller, E. (2019). *Creating Great Places: Evidence-based Urban Design for Health and Wellbeing*. Routledge. https://doi.org/10.4324/9780429289637

Davis, J. (2022). *The caring city: Ethics of urban design*. Bristol University Press. https://www.jstor.org/stable/10.2307/j.ctv2jtxrfc

de Klerk, M., de Boer, A., & Plaisier, I. (2021). Determinants of informal care-giving in various social relationships in the Netherlands. *Health & Social Care in the Community*, *29*(6), 1779–1788. https://doi.org/10.1111/hsc.13286

DepthmapX development team. (2017). *depthmapX (Version 0.6.0)* [Computer software]. github.com. https://github.com/SpaceGroupUCL/depthmapX/

Djebbara, Z. (2023). *Affordances in Everyday Life: A Multidisciplinary Collection of Essays*. Springer International Publishing.

Engler-Stringer, R., & Berenbaum, S. (2007). Exploring Social Support Through Collective Kitchen Participation in Three Canadian Cities. *Canadian Journal of Community Mental Health*, *26*(2), 91–105. https://doi.org/10.7870/cjcmh-2007-0030

Farmer, N., Touchton-Leonard, K., & Ross, A. (2018). Psychosocial Benefits of Cooking Interventions: A Systematic Review.

Health Education & Behavior, *45*(2), 167–180. https://doi.
org/10.1177/1090198117736352

Fitz, A., & Krasny, E. (Eds.). (2019). *Critical care: Architecture and
urbanism for a broken planet*. Architekturzentrum Wien ; MIT
Press.

Gabauer, A., Knierbein, S., Cohen, N., Lebuhn, H., Trogal, K., &
Viderman, T. (2021). Care, Uncare, and the City. In *Care and
the City*. Routledge.

Gabauer, A., Knierbein, S., Cohen, N., Lebuhn, H., Trogal, K.,
Viderman, T., & Haas, T. (Eds.). (2021). *Care and the city:
Encounters with urban studies*. Routledge. https://www.
taylorfrancis.com/books/9781003031536

Gehl, J. (2010). *Cities for people*. Island Press.

Gibson, J. J. (1986). *The Ecological Approach to Visual Perception*.
Psychology Press.

Google Earth. (2023). *Google Earth* [Satallite image].
Retrieved 21 January 2025, from https://earth.
google.com/web/@51.89433955,4.48556154,-
0.02807138a,3546.87730107d,35y,0h,0t,0r/
data=CgRCAggBOgMKATBCAggASg0I_____ARAA

Hauderowicz, D., & Serena, K. L. (Eds.). (2020). *Age-inclusive public
space*. Hatje Cantz.

Held, V. (2005). *The Ethics of Care: Personal, Political, and Global*.
Oxford University Press.

Hertzberger, H., Ghaït, L., Vlijmen, M. van, & Rike, I. (2016). *Lessons
for students in architecture* (Seventh edition). Nai010
Publishers.

Hillier, B., & Hanson, J. (1984). *The Social Logic of Space*.

Cambridge University Press. https://doi.org/10.1017/CBO9780511597237

Ho, E. L.-E., Zhou, G., Liew, J. A., Chiu, T. Y., Huang, S., & Yeoh, B. S. A. (2021). Webs of Care: Qualitative GIS Research on Aging, Mobility, and Care Relations in Singapore. *Annals of the American Association of Geographers*, *111*(5), 1462–1482. https://doi.org/10.1080/24694452.2020.1807900

Imrie, R., & Kullman, K. (2016). Designing with Care and Caring with Design. In *Care and Design* (pp. 1–17). John Wiley & Sons, Ltd. https://doi.org/10.1002/9781119053484.ch1

Jacobs, J. (1961). *The death and life of great American cities* (1st Vintage books edition). Vintage Books.

Kemp, C. L., Ball, M. M., & Perkins, M. M. (2013). Convoys of care: Theorizing intersections of formal and informal care. *Journal of Aging Studies*, *27*(1), 15–29. https://doi.org/10.1016/j.jaging.2012.10.002

Kern, L. (2020). *Feminist city*. Verso.

Klumpenaar, S. (2024, December 27). Grof geld betalen voor beschimmelde huurwoning: Arbeidsmigranten hebben weinig keus. *NRC*. https://www.nrc.nl/nieuws/2024/12/27/grof-geld-betalen-voor-beschimmelde-huurwoning-arbeidsmigranten-hebben-weinig-keus-a4877617

Koning, A. de. (2018, June 26). Burgemeester gaat zelf de Tarwewijk in om tij te keren. *AD.nl*. https://www.ad.nl/rotterdam/burgemeester-gaat-zelf-de-tarwewijk-in-om-tij-te-keren~aba62389/

Krasny, E. (2019). Architecture and care. In A. Fitz & E. Krasny (Eds.), *Critical care: Architecture and urbanism for a broken*

planet (pp. 33–41). Architekturzentrum Wien ; MIT Press.

Krasny, E. (2022). Care Trouble. In C. Budde & M. Pepchinski (Eds.), *Women Architects and Politics: Intersections between Gender, Power Structures and Architecture in the Long 20th Century* (pp. 27–45). transcript Verlag.

Laar, P. van de. (2007). *Stad van formaat: Geschiedenis van Rotterdam in de negentiende en twintigste eeuw* (2e dr). Waanders.

Laar, P. T. van de, Jaarsveld, M. van, & Klaassen, L. (2004). *Historische atlas van Rotterdam: De groei van de stad in beeld*. SUN.

Lanng, D. B., & Jensen, O. B. (2022). A Walk in the Park: Affordance as Urban Design Tool for Creating Inhabitable Cities. In Z. Djebbara (Ed.), *Affordances in Everyday Life: A Multidisciplinary Collection of Essays* (pp. 41–49). Springer International Publishing. https://doi.org/10.1007/978-3-031-08629-8_5

Lefebvre, H. (1991). *The production of space* (D. Nicholson-Smith, Trans.). Blackwell Publishing.

Madanipour, A. (2021). Critical Reflections on Care. In A. Gabauer, S. Knierbein, N. Cohen, H. Lebuhn, K. Trogal, T. Viderman, & T. Haas (Eds.), *Care and the City* (pp. 15–23). Routledge.

Maier, J. R. A., Fadel, G. M., & Battisto, D. G. (2009). An affordance-based approach to architectural theory, design, and practice. *Design Studies*, *30*(4), 393–414. https://doi.org/10.1016/j.destud.2009.01.002

Markus, T. A. (1993). *Buildings & Power: Freedom and Control in the Origin of Modern Building Types*. Routledge.

52

Matrix. (1984). *Making Space. Woman and the man made enviroment.* Pluto Press Limited.

Milligan, C., & Wiles, J. (2010). Landscapes of care. *Progress in Human Geography*, *34*(6), 736–754. https://doi.org/10.1177/0309132510364556

Nord, C. (2018). Resident-centred care and architecture of two different types of caring residences: A comparative study. *International Journal of Qualitative Studies on Health and Well-Being*, *13*(1). https://doi.org/10.1080/17482631.2018.1472499

Nord, C., & Högström, E. (Eds.). (2018). *Caring architecture: Institutions and relational practices* (Vol. 19). Cambridge Scholars Press. https://doi.org/10.1080/14649365.2018.1525836

Pallasmaa, J. (2016). Empathy, Design and Care – Intention, Knowledge and Intuition: The Example of Alvar Aalto. In C. Bates, R. Imrie, & K. Kullman (Eds.), *Care and Design* (pp. 138–154). John Wiley & Sons. https://onlinelibrary.wiley.com/doi/10.1002/9781119053484.ch9

Pennarts, J., Zurhake, S., & Start, R. (2024, March 8). *Nederland stevent af op zorginfarct en regels blokkeren hervormingen*. NOS nieuws. https://nos.nl/artikel/2511983-nederland-stevent-af-op-zorginfarct-en-regels-blokkeren-hervormingen

Rasmussen, J. D. (2017). *En upåagtet verden af bevægelse: Et etnografisk studie af hverdagsliv blandt usædvanlige ældre mennesker i storbyen*. Aalborg Universitet.

Rasmussen, J. D. (2020). Being-at-Home in the Urban Sphere;

Dwelling in Para-Homely Settings; Benches and the Park-like Area as a Para-Home; The Corner as a Social Micro-Institution; Ad Hoc Sociality in the Church. In D. Hauderowicz & K. L. Serena (Eds.), *Age Inclusive Public Space* (pp. 45–49). Hatje Cantz Verlag. http://www.hatjecantz.de/age-inclusive-public-space-7510-1.html

Repository: 49 Methods and Assignments for Writing Urban Places. (2024). In C. M. e Moura, D. M. Bernal, E. R. Restrepo, K. Havik, & L. Niculae (Eds.), *TU Delft OPEN Books*. TU Delft OPEN Books. https://doi.org/10.59490/mg.102

Rodgers, J., Valuev, A. V., Hswen, Y., & Subramanian, S. V. (2019). Social capital and physical health: An updated review of the literature for 2007–2018. *Social Science & Medicine, 236*, 112360. https://doi.org/10.1016/j.socscimed.2019.112360

Rothuizen, J. (2014). *The soft atlas of Amsterdam*. Nieuw Amsterdam Uitgevers.

Rutherford, A., & Bowes, A. (2014). Networks of Informal Caring: A Mixed-Methods Approach. *Canadian Journal on Aging / La Revue Canadienne Du Vieillissement*, *33*(4), 473–487. https://doi.org/10.1017/S0714980814000361

Schouten, J. (2024, September 5). De wijkkliniek is dé oplossing voor 'draaideurouderen', zegt deze hoogleraar: 'De vraag naar de acute ouderenzorg neemt alleen maar toe'. *NRC*. https://www.nrc.nl/nieuws/2024/09/05/de-wijkkliniek-is-de-oplossing-voor-draaideurouderen-zegt-deze-hoogleraar-de-vraag-naar-de-acute-ouderenzorg-neemt-alleen-maar-toe-a4864726

54

Smits, F. (2024). Whose infrastructure, which commons? On the maintenance of an emergent health commons in the Netherlands. *Social & Cultural Geography*, *25*(6), 947–966. https://doi.org/10.1080/14649365.2023.2218337

Stiching Wijkcollectie, & Veldacademie. (2022). *Tarwewijk: Wijkidentiteit(en)*. https://www.veldacademie.nl/projecten/identiteit-en-van-de-wijk

Stroet, W., Veen, A. V., & Vet, A. de. (2023). *Subjective atlas of Amsterdam*. Subjective Editions.

Tronto, J. C. (2019). Caring Architecture. In A. Fitz & E. Krasny (Eds.), *Critical care: Architecture and urbanism for a broken planet* (pp. 26–32). Architekturzentrum Wien ; MIT Press.

Tronto, J. C., & Fisher, B. (1990). Toward a Feminist Theory of Caring. In E. Abel & M. Nelson (Eds.), *Circles of Care* (pp. 36–54). SUNY Press.

Tuana, N. (2017). Feminist Epistemology: The subject of knowledge 1. In I. J. Kiddl, J. Medina, & G. Pohlhaus (Eds.), *The Routledge Handbook of Epistemic Injustice*. Routledge.

Turner, A., Doxa, M., O'Sullivan, D., & Penn, A. (2001). From Isovists to Visibility Graphs: A Methodology for the Analysis of Architectural Space. *Environment and Planning B: Planning and Design*, *28*(1), 103–121. https://doi.org/10.1068/b2684

Verbeek-Oudijk, D. (2019). *Receiving and providing informal care: Does context matter?* [PhD-Thesis - Research and graduation internal].

Vet, A. de (Ed.). (2018). *Subjective atlas of Brussels*. Subjective Editions.

Weil, J. (2023). *Why Place Matters: Place and Place Attachment for*

Older Adults. Taylor & Francis.

Wijk- en Speeltuin Vereniging Tarwewijk—Geschiedenis. (n.d.).

Retrieved 21 January 2025, from http://speeltuin-tarwewijk.

nl/Gastenboek/Geschiedenis/

Wijkprofiel Rotterdam. (n.d.). Retrieved 15 December 2024, from

https://wijkprofiel.rotterdam.nl/nl/2024/rotterdam

APPENDIX 1
FIELDWORK BOOKLET
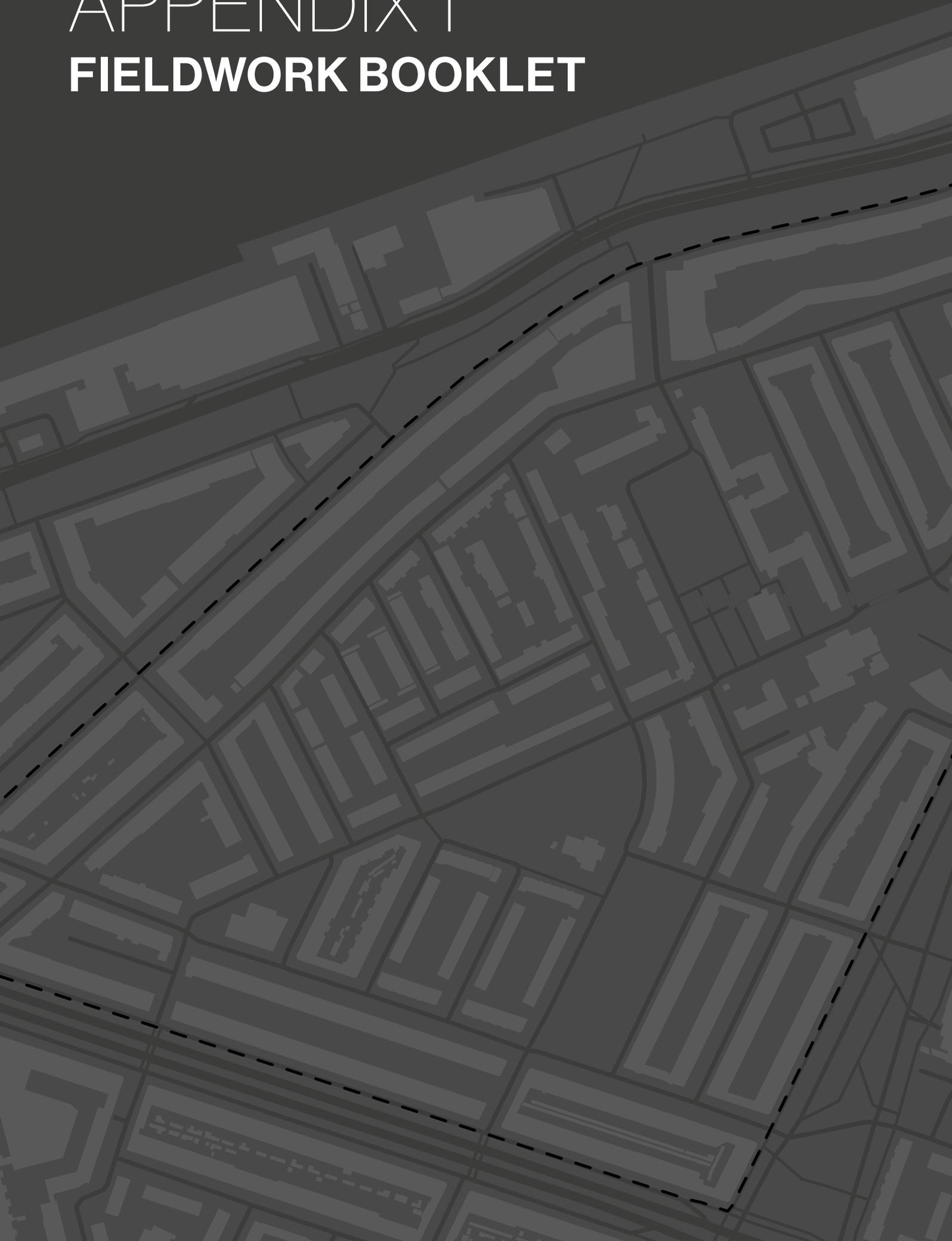
NETWORKS
SUPPORTING RESEARCH
FOR THE RESEARCH
REPORT
OF CARE

FIELDWORK
BOOKLET
EMMY
VERMEULEN
5 MAY 2025

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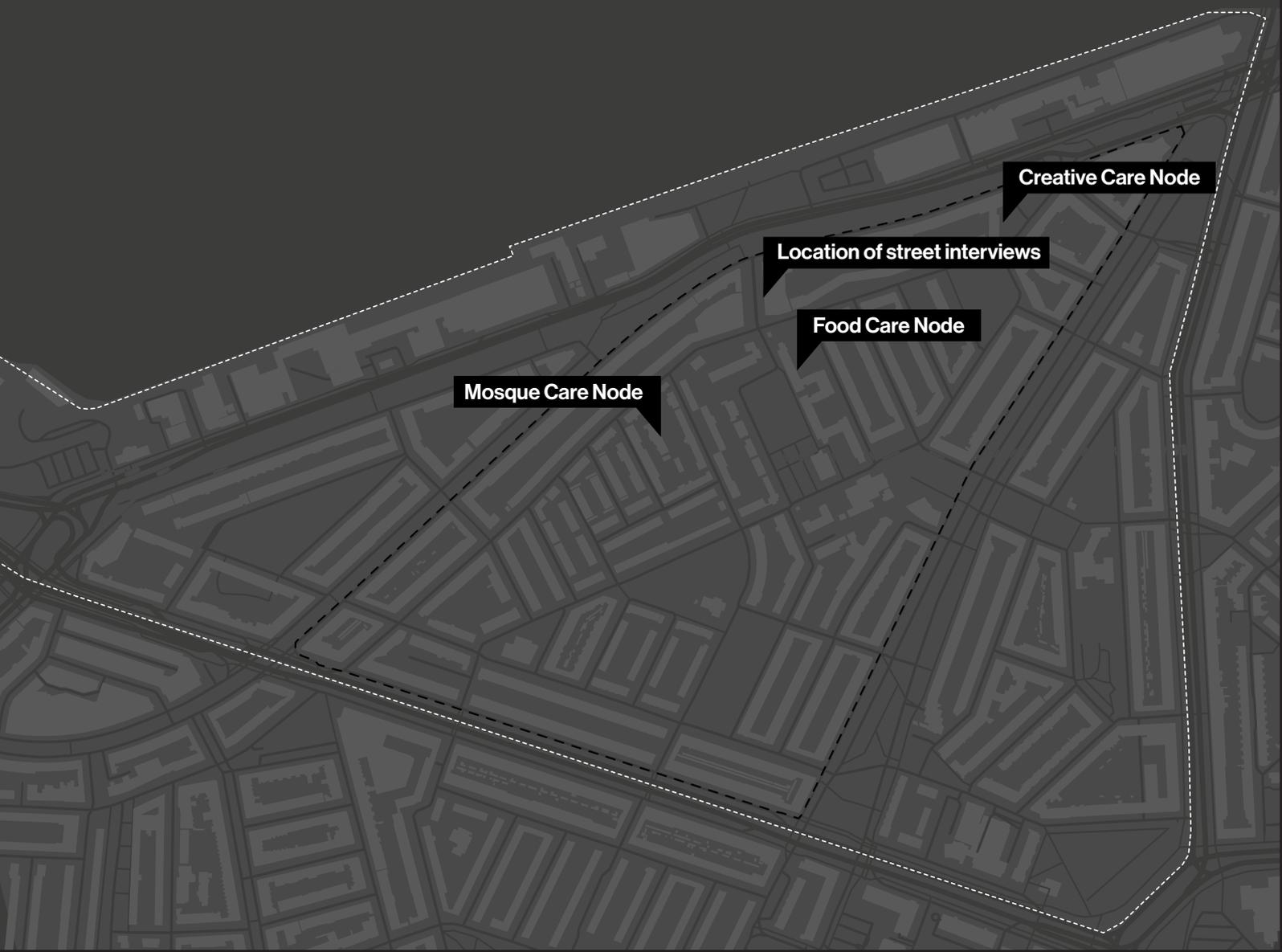
This fieldwork booklet serves as a detailed companion to my graduation research, *Networks of Care*. Conducted within the MSc Architecture, Urbanism, and Building Sciences program at TU Delft, this research explores the role of care networks and care nodes within urban neighborhoods, focusing on Tarwewijk, Rotterdam.

Tarwewijk, with its socio-economic diversity and historical challenges, provides a compelling backdrop for investigating how informal and formal care practices are spatially distributed and supported. The concept of care nodes, specific spaces that act as hubs for care interactions, lies at the heart of this research. By understanding how these nodes function socially and spatially, the study aims to inform design strategies that foster inclusive and supportive environments.

This booklet documents the methods, observations, and reflections gathered during the fieldwork phase of the research. It encompasses participant observations and semi-structured interviews with residents. Together, these elements offer a nuanced perspective on the lived experiences of care within Tarwewijk, highlighting challenges and opportunities for creating more connected and resilient urban environments.

The fieldwork was conducted in collaboration with three fellow students from the same graduation studio, each focusing on a distinct yet complementary theme. Together, we identified overarching topics that connected our individual research, enabling us to collectively conduct street interviews and participant observations. While the fieldwork itself was a collaborative effort, the raw fieldnotes presented in this booklet were written and refined solely by me.

To protect the privacy and anonymity of participants, pseudonyms have been used in place of real names, and specific place names are omitted where necessary. Photographs were also taken during the fieldwork to document the observed spaces and activities. However, most these images are not included in this booklet to ensure confidentiality. Instead, the focus is on raw fieldnotes, sketches, and spatial mappings to ethically represent the research process.

By presenting these materials, this booklet not only captures the research process but also serves as a foundation for the design guidelines developed in the final phase of the research.

Fig. 1 Map of places where
fiedlwork was conducted.

PARTICIPANT OBSERVATIONS

This section documents the raw fieldnotes recorded during participant observations at three key locations in Tarwewijk, selected for their potential to function as informal care nodes. The observations were written by hand in physical notebooks during visits (figure 2), where we engaged in a participatory role while simultaneously observing interactions, activities, and the spatial use of these environments.

After the initial fieldnotes were recorded, they were revisited and annotated in red ink to highlight key insights and observations. These refined notes were subsequently transcribed and are presented in this booklet. As such, the material reflects an iteration of the original fieldnotes, offering a detailed and structured account of the spatial and social dynamics of care within these spaces.

Fig. 2 Excerpt from the physical
fieldnotes (names redacted).

They even offered to pay her.
explained that while she occasionally
charged for this service, it didn't feel right
to ask for money in a place like Table A
Way. "Everybody does something for
somebody here, so why would I change
for helping this way?" she said. Her
sentiment captured the communal spirit
of the group.

The whole moment felt warm and homely,
something intimate and comforting in
this shared, communal space. However
we did it in a corner of the room, tucked
away behind a wall, out of sight from
the others, out of sight from the big table.
It was a small, private pocket of connection
within the larger gathering.

FLOORPLAN

Creative Care Node - 1 November 10:00 – 13:00

This was our first visit to the Creative Care Node group in Tarwewijk. They had responded positively to our email, inviting us to come by and get acquainted. They recommended that we visit in person, as they work with vulnerable people.

The gathering space is a common area connected to a senior living complex located above. Creative Care Node rents this vibrant room from the complex. The walls are painted in purple, and the room is filled with handmade objects created by the group: cards, drawings, ceramics, textiles, and more. It feels like a creative hub.

People trickle in gradually, forming a diverse group: elderly residents from the complex above, neighborhood locals of various backgrounds, and the organizers, who all have backgrounds in the arts. There are even two children present, as it's fall break.

I spoke with Jacob, one of the organizers. He explained that Creative Care Node intentionally avoids partnering with official entities like the municipality. They believe that genuine community must come from within the neighborhood. If direction or funding comes from an external authority, it creates an unequal dynamic, one that doesn't foster true community spirit. Community, he insists, must be cultivated from the ground up.

Each week, a new activity is planned. This week marks the start of a multi-week project: creating a coffee table book filled with collages made by the group. Artist Toon Teeken came by to share his own photo-collage books, where photos—often his own—serve as a guiding theme. Teeken works daily on these books to clarify his relationship with things and the world. He recounted someone's reaction to his work: "It feels like I'm looking into someone's brain."

The idea is for the Creative Care Node group to create their pages similarly. The themes for each page will reflect activities the group has done together over the past year. Today's theme is "baking Nonnevotten."

Dorothy is a woman I met at Creative Care Node. I overheard her talking with Jacob about their desire to open Creative Care Node one evening each week, so they could share a meal together. Dorothy lives in Carnisse and cooks for people in the Tarwewijk. Twice a week, she cooks for those who are struggling financially, and once a week, she cooks for the children at the local dance school. She uses the dance school's kitchen and people pick up the food once it's ready.

However, she finds this arrangement frustrating. "I'm not a takeout restaurant," she said. Having a place where people could

sit down and eat would mean a lot to her. She invited me to stop by sometime while she's cooking, and I'm looking forward to speaking with her again.

Creative Care Node – 8 November 10:00-13:00
Our second time at a Creative Care Node gathering. This week, we continued working on the collage project.

I sat next to Layla, an Iranian woman who came to the Netherlands as a refugee almost 30 years ago. She spent 18 years living in Hellevoetsluis and has now been a Tarwewijk resident for 10 years.

A petite woman with a gentle demeanor, Layla wore a black and white headscarf and small, black-rimmed glasses. We started talking after laughing at a lighthearted moment—someone had asked someones age, to which they replied, "Oh, I'm quite old—27 years!" Layla chuckled, exclaiming, "Old? Old?" She turned to me and added, "He has his whole life ahead of him!" When she asked my age and I told her I was 24, she smiled and said, "A wonderful age; you have so much still to do." She went on to share that, due to chronic illness, she doesn't feel the same way about her own possibilities.
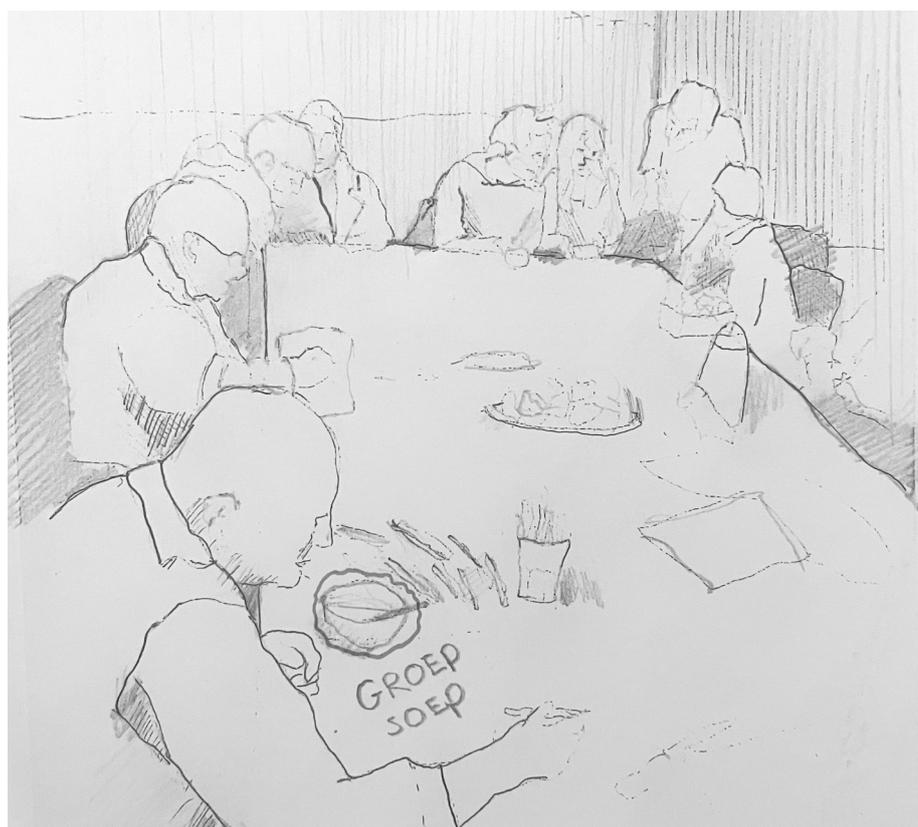

Fig. 3 Sketch of the group gathering around the central activities table.

As we spoke, she shared more of her story. Though she identifies as Iranian, she's lived in the Netherlands for many years, having spent a long period in asylum centers. Those were difficult years for her and her five-year-old son, who came with her from Iran. Her other family members remain in Iran.

When I asked if she worked, Layla told me that she devotes her time to helping others, mostly Iranian refugees who are still in asylum centers or facing deportation. She collects clothing, cooks (often Iranian dishes), raises money, and provides emotional support—but not from her home, as she feels it's essential to keep some distance between her personal life and her charitable work. Besides helping people, Layla also enjoys being creative, mostly with fabric.

She has seen terrible things, she said. "Awful things happen in life, but what matters is how you handle them. There are things we cannot control, but our reaction to them is our choice." For Layla, prayer, meditation, and helping others have been her anchors through it all.

Creative Care Node – 15 November 10:00-13:00

This was my third time at a Creative Care Node group gathering, and the final session for working on the collages. The furniture was arranged a little differently this time. The big table, where we all sit together, had been moved closer to the front window. I found myself sitting next to a fellow student and an elderly man. A few people were attending for the first time, and it was interesting to see how easily they were accepted into the group. There was no hesitation; they were welcomed as if they had always been a part of it.

Feeling a bit tired, I wasn't as talkative as usual. However, this gave me the chance to listen more closely to the conversations happening around me. The elderly man beside me was chatting with Lotte, an older woman who had been very talkative on the first day. Lotte is originally from Maastricht but has lived in Rotterdam for many years. They talked about their lives and their activities, commenting on how important it was to stay busy. Their conversation reflected the shared value in this group of finding purpose and staying engaged.

Layla was also at this gathering, though we weren't sitting close to each other. At one point, she came over and asked how I was doing. Then, she told me she had brought her tools for threading and shaping eyebrows, thread, tweezers, cotton pads. She mentioned that she sometimes does this as paid work but offered to do it

for me that day, free of charge. Initially, I didn't fully understand what she meant, but she asked me to wait. Later, she guided me to a stool she had set up in the corner of the room.

  With practiced skill, Layla plucked my eyebrows using a thread, twisting it in a way that swiftly removed the hairs. As she worked, other women from the group came over, watching and asking if she could do their faces as well. They even offered to pay her. Layla explained that while she occasionally charged for this service, it didn't feel right to ask for money in a place like the Creative Care Node. "Everybody does something for somebody here, so why should I charge for helping this way?" she said. Her sentiment captured the communal spirit of the group.

  After me, two other women sat down, and Layla quickly plucked their unwanted hairs with her skilled technique, and it was clear that she was highly experienced.

Fig. 4 Sketch of Layla threading an other lady her eyebrows.

The whole moment felt warm and homely, something intimate and comforting in this shared, communal space. However, we did it in a corner of the room, slightly tucked away behind a wall, out of sight from the others seated at the big table. It was a small, private pocket of connection within the larger gathering.

Food Care Node – 20 november 12:30-17:00

I spent wednesday afternoon helping Dorothy in her kitchen, located in a former school building that has been transformed into studio spaces. The building, a rijksmonument, holds rich heritage and is now home to a variety of creative and community-oriented spaces. Studios in the building are occupied by artists, dance studios, and even a childcare center, all sharing the same hallway as Dorothy's kitchen.

The kitchen itself is modern and well-equipped. Dorothy has been using it since April, though she doesn't pay rent for the space. She didn't explain why, but it's clear she values having a stable place to prepare meals for the neighborhood.

Dorothy , originally from Kenya, moved to the Netherlands at 18. Her journey hasn't been easy—she shared how a trip back to Kenya for family reasons caused her to lose control of a kitchen she had previously run in Carnisse. Returning to find it taken over, she had to start from scratch. Now living in Carnisse, after selling her home in Tarwewijk due to financial struggles, Dorcas remains deeply committed to her community.

Twice a week, she cooks meals for people in the neighborhood,

Fig. 5 (left) Food preparation.
Fig. 6 (right) Meal pick up set up.
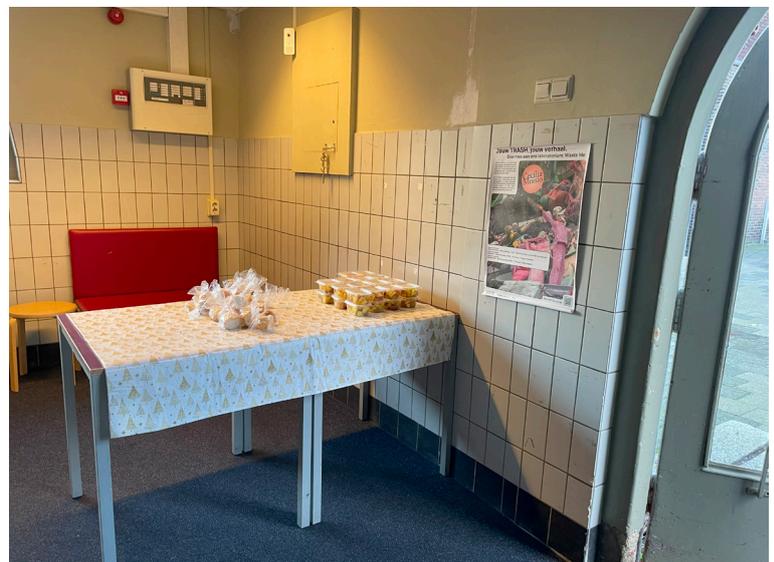
and on Thursdays, she prepares food for a girls' dance club in the same building. Her work is voluntary, supported by a government subsidy tied to a neighborhood initiative. However, the subsidy is not guaranteed, each time she must reapply, which she admitted can feel discouraging.

When I arrived at 12:30, Dorothy suggested we start slicing ingredients and chat as we worked. On the menu that day was macaroni, a fruit salad made with mango, apple, and a bit of multi-fruit syrup, and a piece of baguette for each meal. Around 35 people had signed up.

Dorothy explained her process: new participants must contact her for a brief conversation before joining, while regulars receive a menu photo via WhatsApp. Most of her clients are in financial difficulty, many dealing with debt. She shared the story of a nearly 100-year-old man who lives in a nearby flat but can't leave his apartment because the elevator doesn't reach his floor. Dorothy cooks for him twice a week and delivers the meals directly to his door.

That day, the team included Mo, a man from Egypt who has lived in the Netherlands for about a year and a half while awaiting residency. He doesn't speak Dutch but communicates in French and Arabic. Dorothy met him at an event where she had catered, and since then, he has occasionally helped her out. Mo sees Dorothy as a sister, he joked. Later, a retired Surinamese-Hindustani woman arrived to help, explaining she had been delayed by a dentist appointment and a COVID vaccination.

As we worked, Dorothy and I discussed the neighborhood. She

Fig. 7 (left) Entrance of the school building.
Fig. 8 (right) Stairwell of the Food Care Node.

expressed concern about how people treat their surroundings, attributing problems like trash-strewn streets to a lack of ownership. "People don't see the neighborhood as theirs," she said. I suggested this might stem from a lack of pride, and she agreed, using the example of overflowing garbage bins. Instead of taking their trash home, people pile it next to the bins, leading to ripped bags and scattered waste. She explained that she's seen this happen in her own neighborhood and believes social control can help, sharing how neighbors in her building began ensuring the entry door stayed locked to reduce disturbances from people drinking there at night.

Dorothy noted, however, that despite its issues, she enjoys living in the area. What she feels is missing is a central space where people can gather. Her kitchen only offers takeaway meals due to restrictions from the building's owner, though she believes both the community and herself would benefit from a space where people could sit, eat, and connect.

While cooking, the conversation shifted to the role of women, sparked by Dorothy mentioning her online studies in policy governance. She is currently writing her thesis on policymaking and the lack of female representation in negotiations in Kenya. The Surinamese-Hindustani volunteer joined in, noting that the position of women in India has been improving, though challenges remain.

By 16:00, we began setting up tables in the building's entrance for meal distribution. Dorcas also brought out a clothing rack filled with donated items for people to take. At 16:30, people started arriving to pick up their meals.

The atmosphere was a mix of efficiency and warmth. Some people came and left quickly, their interactions brief and transactional. Others lingered, chatting with Dorothy and sometimes with each other. Dorothy seemed to know most people by name, and they knew hers. In one moment, she asked a man to help replace a hallway lightbulb, mentioning she'd been working in the dim for too long.

Some people took clothing, while others stayed to talk. I noticed that those who knew each other often arrived together, creating small social pockets even in this informal setting. Watching these interactions, I could understand why Dorothy wants a communal dining space. While her current setup meets an essential need, it's clear that a place to eat together could foster even deeper connections.

Still, she remains determined to support her community, one meal at a time. By the end of the day, I agreed to help Dorothy every

other Wednesday with cooking for a couple of weeks. She seemed genuinely happy to have the support, and I felt glad to contribute more regularly to her work.

Creative Care Node – 22 November 10:00-13:00

With no scheduled activities on Fridays, the gatherings have become a bit unstructured. People arrive later than usual, and conversations linger longer before everyone eventually sits down at the table.

Lotte had brought a collection of secondhand items from home to add to the "free store" in the Creative Care Node space. The table, already stocked with objects like plates, glasses, jewelry, and caps, now also had books and board games. Next to the table stood a clothing rack. I suggested we arrange and display the new items, making the space more inviting.

Many people who come to Creative Care Node often take something from the free store if they see something they like or believe someone they know could use it. Clothes and shoes are especially popular.

A new woman at the gathering showed interest in the clothing. However, I overheard Miriam, a long-standing (and somewhat bossy) member of the group, making comments about how this new attendee only comes to "take." While the organizers encourage an open, welcoming environment where everyone is free to join, it's clear not everyone in the group shares this perspective. Unfortunately, I didn't have the chance to follow up on this tension.

In one of the more secluded areas of the space, some women worked with the sewing machines that are available. They were repairing or modifying clothing. As others came to observe, the women began helping each other with techniques and sharing tips for sewing. The scene was collaborative, with the women exchanging ideas and working together, creating a small, focused pocket of activity within the larger space.

Linda, one of the women in a leadership role, mentioned she'd like to start a webshop to sell items the group creates, like hand-painted ceramics, rugs, and other crafts. Today's activity for the group was to draw their dream store, but enthusiasm seemed low.

As always, there was group soup. I learned that every Friday, a man from the Cultuurwerkplaats Tarwewijk brings leftover bread from a local bakery to pair with the soup. This indicates there's

some level of connection between Creative Care Node and the community center, though I'm unsure how strong or structured that relationship is.

Food Care Node – 27 november 12:30-16:00

This was my second visit to Dorothy in her kitchen. During my first visit, I had taken a more assertive role by asking lots of questions, but this time, I decided to step back and observe more. Beth, the Surinamese-Hindustani woman, was there from the start. Her presence subtly shifted the group dynamic.

It was a gray, stormy day, with bad weather on the horizon. On the menu was lasagna with spinach and salmon. My task was to make the béchamel sauce. Something I hadn't fully understood on my first visit, but became clearer this time, is that Dorothy isn't the only one using the kitchen. On days she isn't there, other users of the building also work in the space, such as children attending cooking classes.

Dorothy and Beth expressed their frustration about the other kitchen users, complaining that the space wasn't being cleaned properly and dirty dishes were often left behind. These kinds of minor conflicts are likely inevitable in a shared space, where issues of ownership and responsibility often come into play.

A man I recognized from my previous visit came in after about an hour. I remembered him as one of the men who had picked up a meal last time. He came to have coffee with Dorothy. On Saturday, the two of them planned to make an Antillean dish featuring okra. My next task was to prepare the okra, a vegetable I'd heard of but had never worked with or eaten before. Beth knew it from Indian cuisine, and Dorothy mentioned it's also common in Kenyan cooking.

Dorothy and the man wanted to sell the Antillean dish for €10, which is much higher than the usual €2 price for her meals. This was because the ingredients were more expensive, and the preparation was more complex. I didn't get a chance to ask if the €10 meals were targeted at the same customers or if they would be offered to a different network entirely.

At one point, Dorothy needed to get salmon and briefly left to visit the supermarket. She returned with smoked mackerel instead, explaining that the salmon was too expensive to use.

The hallway was busier than during my first visit. The artist who works in the studio next to Dorothy's kitchen was moving her canvases in preparation for an exhibition. An other man also stopped by

to check on the dishwasher, which had broken down. I learned that he acts as an unofficial handyman for the building. He, as it turns out, also benefits from Dorcas's affordable meals.

Unfortunately, I had to leave early because of the storm and wasn't able to observe the meal distribution this time.

Creative Care Node – 29 November 10:00-12:30

This gathering we as students wanted to have a group conversation about health and care in the Tarwewijk. These are some points that were discussed:

- At the Randweg buurthuis there's also a place to come together and eat and drink. There is also sometimes bingo. It is visited frequently.
- A library could be something that is missing, but it is also acknowledged that the library at Zuidplein already has this function.
- Someone says that the accessibility to information of the innitatives and activities is bad. People don't know what is available.
- In the Millinxhuis there is a very nice professional kitchen but it barely gets used by people from the neighborhood. There is a group 'Radar that uses it but only for themselves.
- BuurtBuik is an initiative that is mentioned.
- They agree that eating and cooking healthy meals together is very important. Problem is restaurant permits.
- Continuity of projects is also a problem in the neighborhood. Some say it is because of monetary motives of project leaders.
- There are nice places in the neighborhood but people don't use it.

Food Care Node – 11 december 12:30-17:00

Today's cooking team consisted of Dorothy, Beth, Amara, a Cape Verdean woman, and me. On the Menu: Potatoes, chicken wings, broccoli, and cauliflower.

My task was to prepare the vegetables. Beth had brought a Surinamese treat for us: bojo, a cassava cake. She had thought of us and even warmed it up at home before coming.

Dorothy mentioned that with the holidays approaching, she wanted to do something extra for the people who rely on the meals. She was writing Christmas cards, each addressed by name, and was still considering what additional gift she could give.

The group is still figuring out how to estimate the right amount of food to prepare. On some days, they run out of food, while on days like today, there's a lot left over, too much to fit into the disposable containers. After we portioned and packed the meals and brought them to the entrance hall, there were still potatoes and vegetables left. Amara and Beth plated some food for themselves and asked if I wanted some too.

It felt like an intimate moment, a pause after the busyness of cooking. I asked them if they found it unsatisfying not to see who picks up the food or eats it. They admitted that they did, but they also didn't like standing downstairs, mainly because of how cold the space is.

We also discussed the idea of creating a space where people could eat the meals on-site. While Beth and Amara saw the appeal of this idea, they also pointed out some potential challenges. Many people collect multiple meals to take home to their families, and some simply don't have the time to eat at a specific place or time due to their busy schedules. They worried that these practicalities could make a communal dining space less effective.

I asked Amara more about her background, as she had been quiet earlier but now seemed more open. I also asked whether they knew the people picking up the meals. They said they only recognized them by sight, from when the meals are collected. None of them knew anyone personally who uses the initiative.

They shared that they sometimes hear stories of poverty, such as people running out of money to buy food at the end of the month. But they also attributed it to people not managing their money well. "They spend it on expensive clothes and things," they said, "and only realize later that they don't have enough left for essentials."

Mosque Care Node – 13 December 14:30-15:30

Guus arranged a meeting at a local Pakistani mosque. It is located in a pre-war school building, tucked away behind small workers' houses, making it almost invisible from the street. We discovered it by noticing its presence on Google Maps. The first floor of the building houses artist studios, while the mosque occupies the ground floor.

These are the notes taken during our conversation with Zeeshan, one of the mosque's active volunteers:

About the Mosque and Its Activities
- They organize welfare projects, such as building water wells

and schools.
- The mosque has been in Tarwewijk for 30 years.
- Most visitors come by bike or on foot, though some travel from farther away.
- It functions more as a community center than as a mosque; the mosque is not its primary purpose.
- Local neighborhood workers are familiar with the mosque and its activities.
- They also run initiatives to clean up the neighborhood, often involving children.
- All work is done on a voluntary basis.
- Since the COVID-19 pandemic, they have acquired additional space within the building, doubling their area.
- The building is owned by the municipality, and they rent it (though the exact arrangement was unclear).

Challenges
- Visibility is a problem: the building is hard to see from the street, and a fence around the property can deter people. However, the fence is necessary as it also acts as a security measure, preventing misuse of the secluded nature of the property.
- Zeeshan mentioned that the lack of visibility also impacts their ability to engage with more people in the community.

About Zeeshan
- Zeeshan is originally from Pakistan and came to the Netherlands at the age of five. He sees himself as a bridge between the older and younger generations.
- He disagrees with the claim that Tarwewijk lacks social cohesion. He loves the neighborhood, noting the abundance of local facilities and the improving maintenance of homes.
- He described the mosque/association as the "furniture of the neighborhood," providing stories, listening ears, and a sense of permanence. This makes him optimistic about the future of the mosque and its role in the community.

Future Aspirations
- They are optimistic about the municipality's development plans and support the proposed changes.

- They often host meals during Iftar and would like to expand their role in the community.
- When asked about what they would like to change, Zeeshan mentioned:
- Ensuring the mosque/association continues to exist.
- Developing the space further into a central neighborhood hub.
- Welcoming and supporting more elderly visitors and their families.
- Investing in their facilities to better meet community needs.
- Collaborating with other faith-based organizations, such as churches, to create a shared space.
- Everyone is welcome, regardless of background or beliefs.
- Volunteers, both men and women, contribute equally, sharing tasks like cooking. Zeeshan said he feels there is no distinction between their roles.
- Needs and Shortcomings in the Neighborhood
- Better maintenance of public spaces.
- Improved organization and oversight in the neighborhood.
- Beyond that, he believes the neighborhood offers something for everyone.

A Tour of the Spaces
- Zeeshan gave us a brief tour of the mosque. It consists of one prayer room and two additional rooms used for various activities. He explained that their programming exceeds the space available, forcing them to use rooms multifunctionally. For example, the prayer room is also used for festive gatherings.
- The ceilings are high, but the windows have been sealed off. Zeeshan explained this was a cost-saving measure, as they couldn't afford double-glazed windows, and sealing them helped with insulation. Ideally, they would like natural light, not only for functionality but also to improve the building's appearance and its connection with the neighborhood.
- The three main rooms are connected by a hallway that leads to the kitchen, restrooms, and washing facilities. The kitchen is frequently used, especially during events like Iftar.

ISOMETRIC DRAWINGS

The isometric drawings presented depict the key features of the observed spaces. These drawings have been simplified to highlight the spatial configurations and elements most relevant to the research focus. By emphasizing essential components, they provide a clear visual reference to support the analysis discussed in the research report.

The drawings were created using a combination of photographs taken during fieldwork and memory-based sketches. While they are not comprehensive representations of the spaces, they serve as tools to better understand the relationship between spatial design and care practices within the identified care nodes.
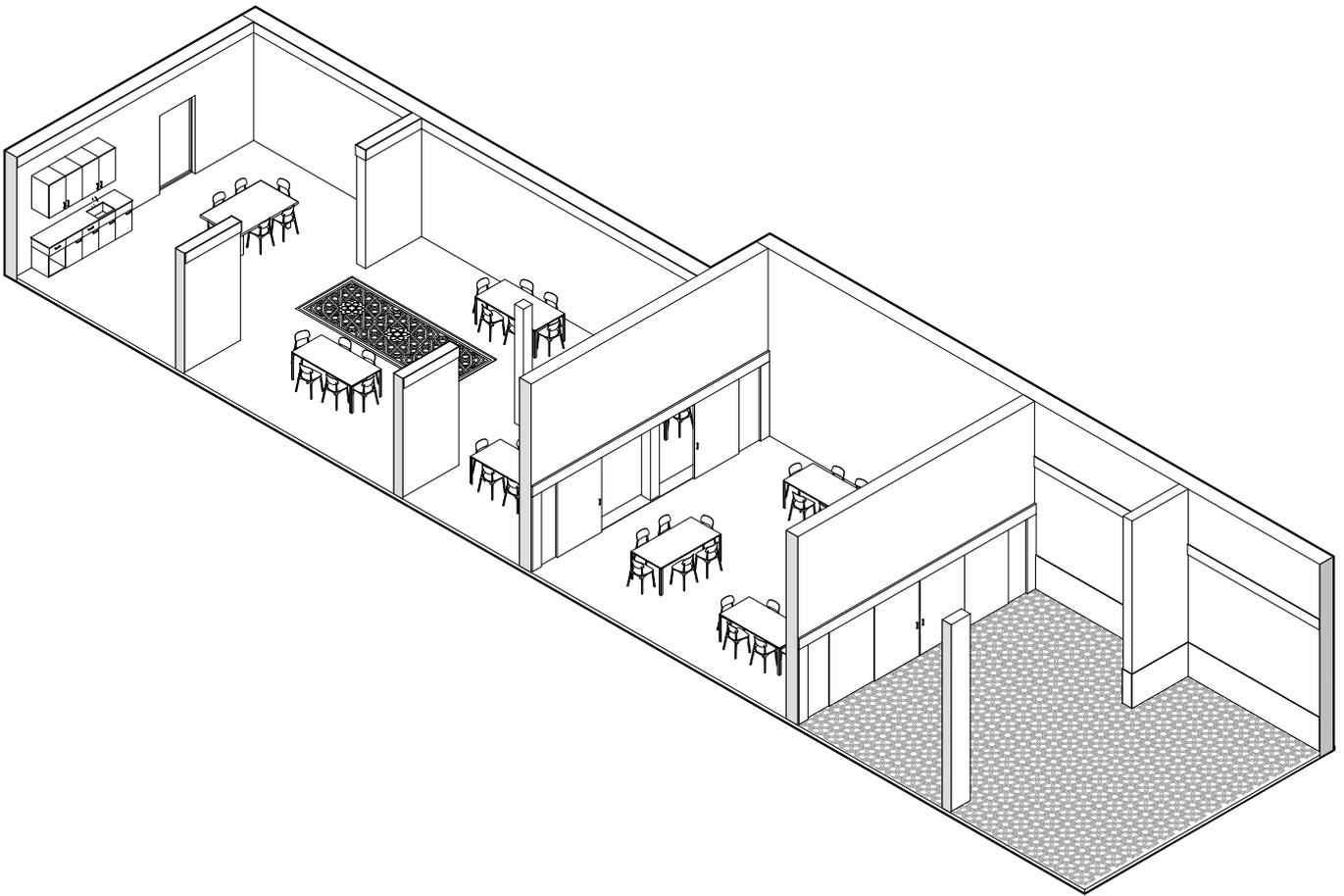
Fig. 8 Isometric sketch of the
Mosque Care Node.
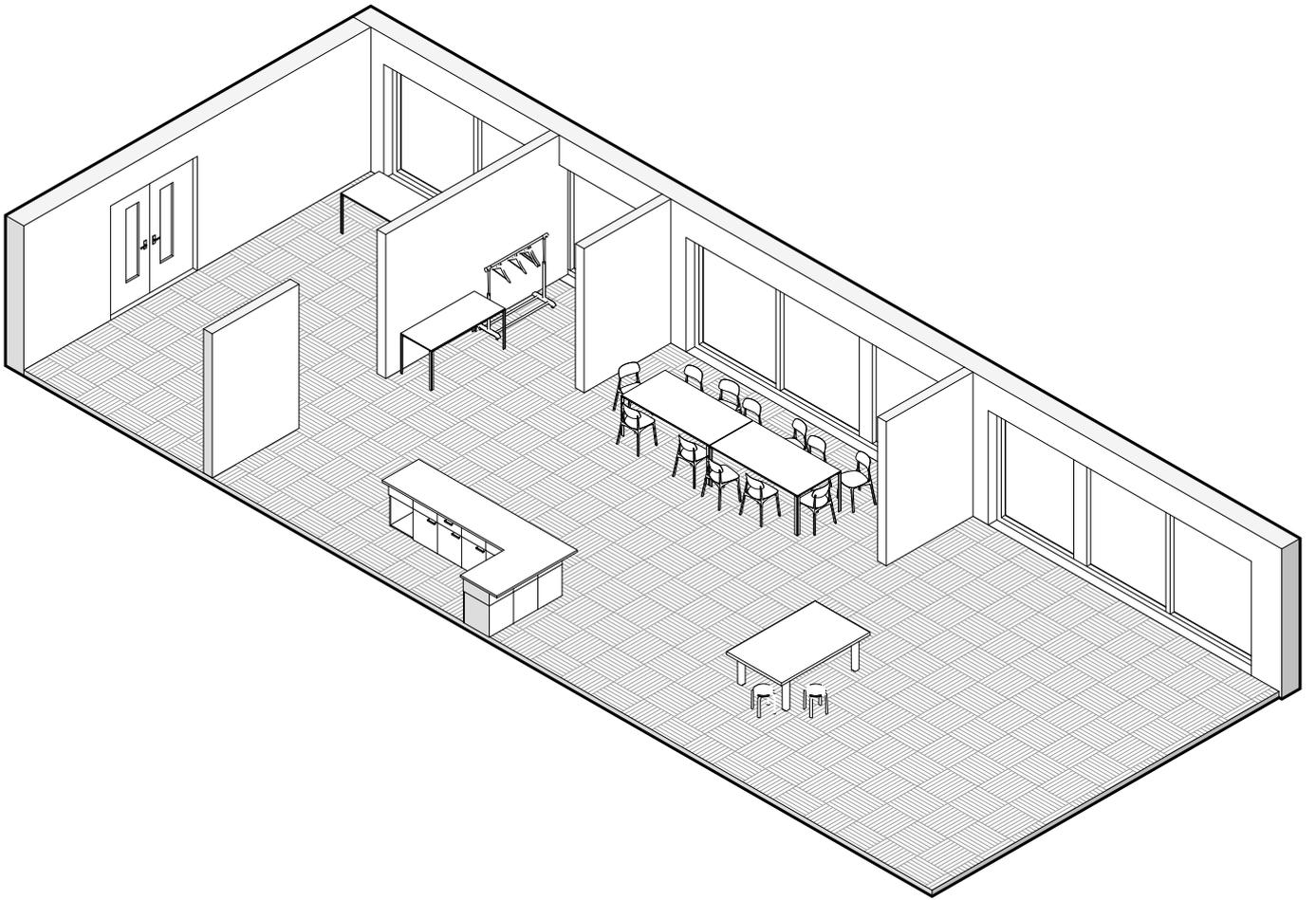
Fig. 9 Isometric sketch of the
Creative Care Node.
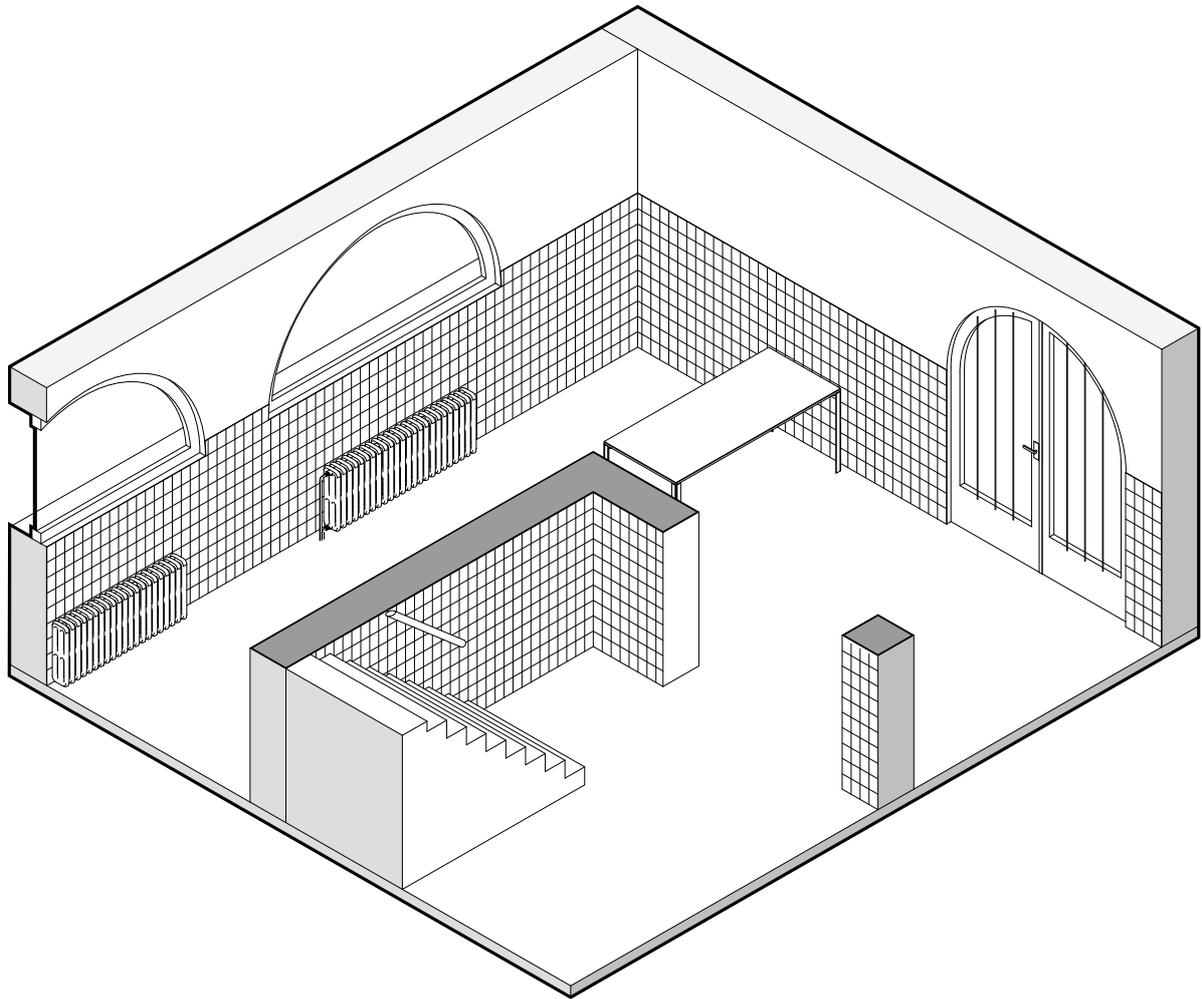
Fig. 10 Isometric sketch of the entryway of the Food Care Node.
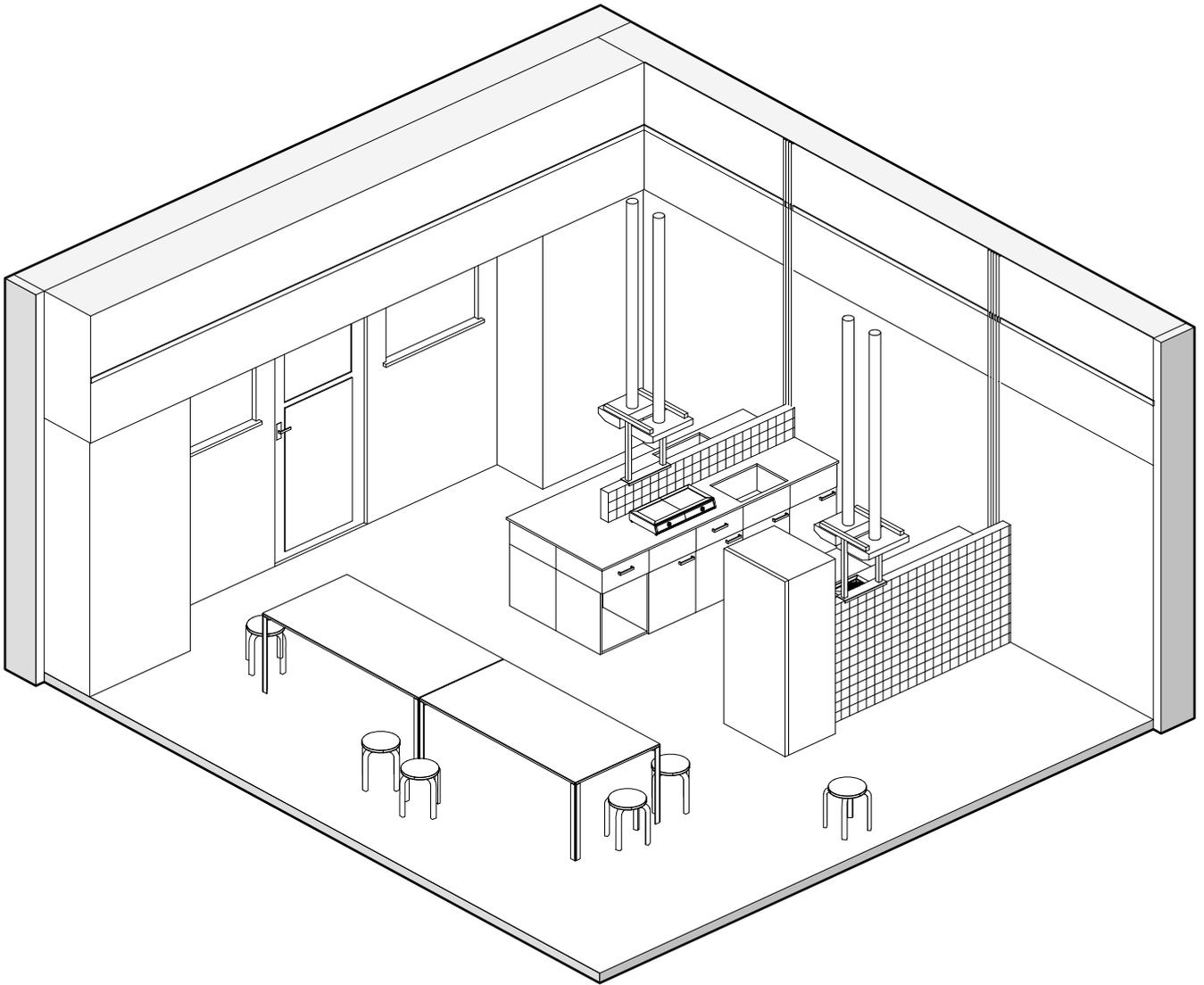
Fig. 11 Isometric sketch of the
kitchen of the Food Care Node.

MOVEMENT MAPS

As part of the fieldwork, movement maps were created to document how people navigate and use space within the Creative Care Node and Food Care Node. This method involved observing and recording the movements of individuals in these spaces over a set period, typically 30 minutes, to capture the dynamics of activity and interaction.

In the Creative Care Node, observations focused on how participants moved between key areas, such as the communal table, the coffee and tea bar, and the clothing rack near the entrance. The aim was to understand which areas attracted the most activity and how spatial configurations facilitated or inhibited movement and interaction.

In the Food Care Node, mapping centered on the use of the kitchen and the adjacent entryway, where meal preparation and distribution occurred. Movements of volunteers and participants were tracked to identify patterns, such as workflow efficiency, points of congestion, and the use of shared facilities like the central kitchen table and the clothing rack in the entryway.

These observations were noted in real time on a printed plan of the space, with movement paths marked and annotated to reflect the intensity and type of activity. The maps provide a visual representation of how these spaces are used, highlighting patterns of interaction, circulation, and spatial focus.

Fig. 12 Movement Map of the
Creative Care Node.
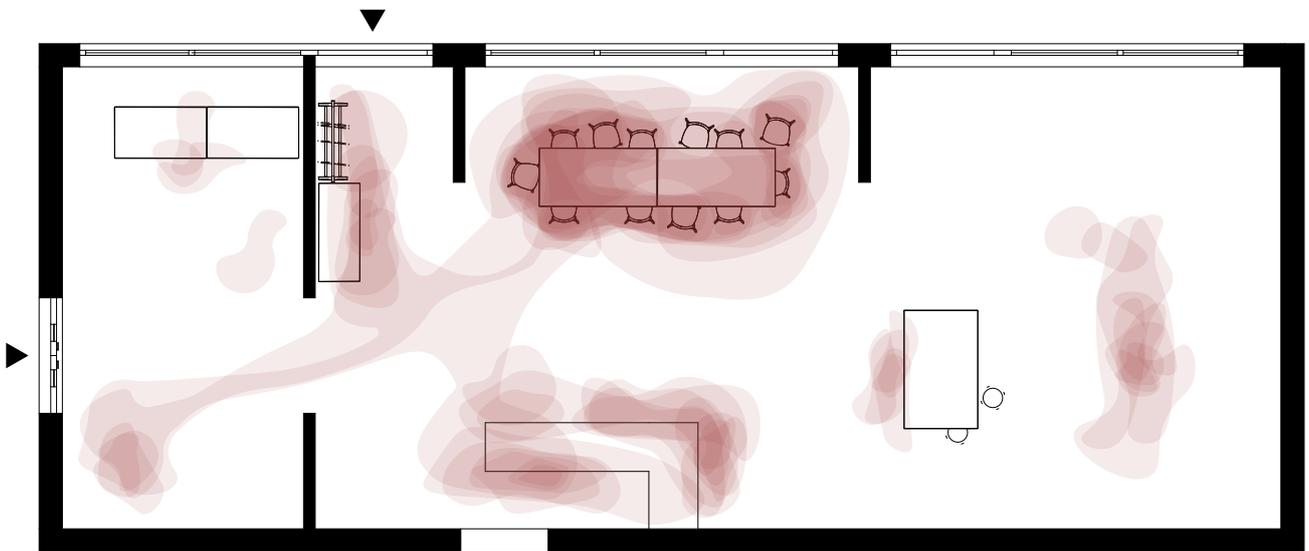
Fig. 13 Movement Map of the
Food Care Node.
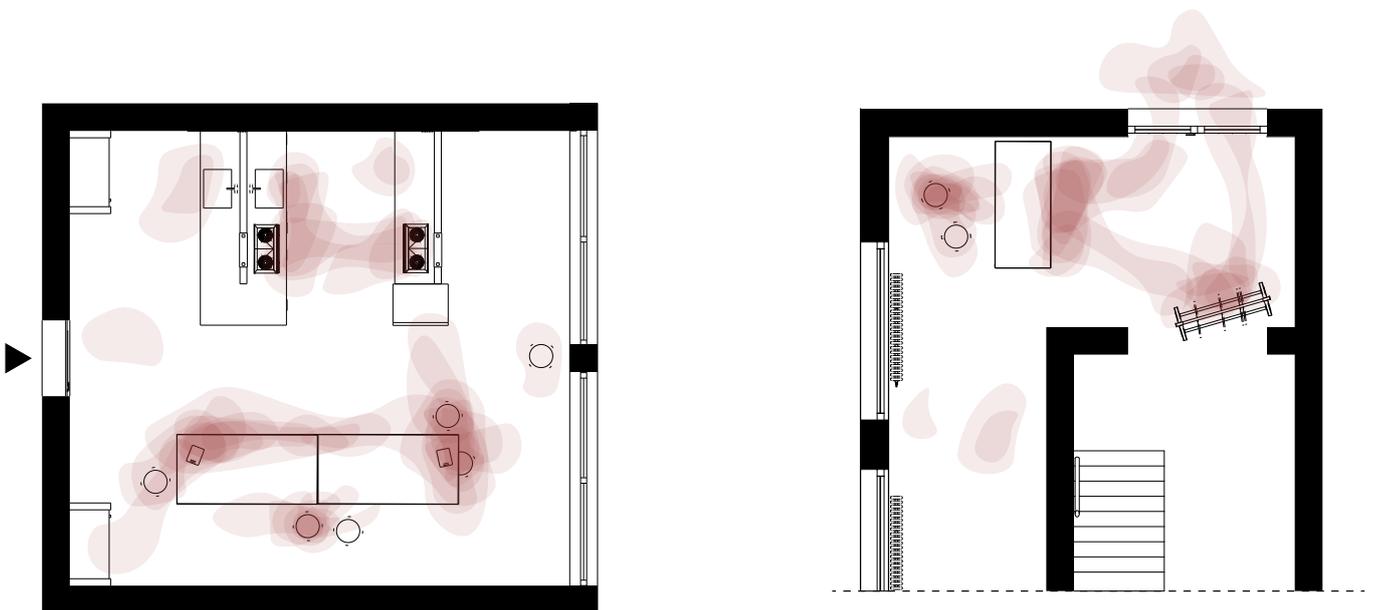
STREET INTERVIEWS

This chapter documents the raw notes from semi-structured interviews conducted with 24 residents of Tarwewijk. The interviews aimed to explore the social and spatial dynamics of care within the neighborhood, focusing on three key questions: where residents feel most at home, where they meet others, and how acts of care take place.

The interviews were conducted on two separate days (November 25, 2025 & November 29, 2025) outside a supermarket in Tarwewijk (figure 1). For approximately four hours each day, we approached passersby with a board displaying a map of the neighborhood and the three questions in bold. To encourage participation, we also offered cake as a token of appreciation for their time. Despite our efforts to engage a diverse group, we observed certain patterns in participation: men were more likely to stop and talk, while women often cited caregiving responsibilities as a reason for not being able to join.

These interviews form a vital foundation for understanding the lived experiences of care and connection in the neighborhood, capturing a snapshot of its diverse social fabric.

	INFO	FEELING AT HOME	HELPING	MEETING
1	Female & male, 20-25 years old, years of residency unknow	Nowhere, Tarwewijk is not pretty, if it's nice weather we go to the centre or maybe another park. Sometimes we walk along the Maashaven because of the view.	Couple weeks ago we called the police because our elderly neighbour didn't open his windows and his curtains for three days. She heard his dog crying so she called.	Well rarely in the neighbourhood mostly if we see friends, it's in the city and so we don't know maybe some of our neighbours. The one person in the street was a friend moved away so now it's no one.
2	Male, age unknown, years of residency unknow	x	x	In the mosque in the neighbour-hood. I drink tea with friends and I have grandchild-ren and they go to school and I meet people there also.
3	Female, 40 years old, 16 years of residency	x	x	She doesn't meet people in the neighbour-hoods, but she knows direct neighbours.
4	Male, 40-50 years old, 29 years of residency	He said on the streets when he was young but now he is on a pension and he doesn't really go on the street anymore, so nowhere in the neighbourhood.		At home mostly but sometimes also church, not precise about what church was it. He uses the Maashaven park to sports sometimes for jogging.

	INFO	FEELING AT HOME	HELPING	MEETING
5	Female, 30 years old, does not live in the Tar- wewijk	My workplace, a primary school in the Tarwewijk.	Sometimes she brings out the garbage cans and then other neighbours bring it back, but only with closest neigh- bours.	They have a neighbourhood WhatsApp group, but it's mostly direct neighbours.
6	Male, 50 years old, years of residency unknow	He was thin- king that we were from the architects that they're planning to demolish the buildings in the neighbourhood He lived in this building across from the new plans and he was very con- cerned about the building that is planned to be built across from him. It's going to be six or seven levels and he was afraid of what it will be for his building, be- cause of sun is- sues and related heating costs.	In Polsland- straat lives an elderly man that has cancer, and he asked him to help him with the move fur- niture because he had to move away from a rented apart- ment.	He sits outsi- de of his home when it's nice weather and the sun shines, and he talks to his neighbours be- cause, and neig- hbours do the same. He beca- me friends with his neighbours but he says it really depends on the street, and sometimes peoples aren't nice – i.e. on Brielselaan. He mentions the people are very closed to.

	INFO	FEELING AT HOME	HELPING	MEETING
7	Male, 60 years old, 30 years of residency	Very nice to us. Lives in the triangle on the west of Tarwewijk. Very happy about the neighbourhood.	Lends work equipment mostly to direct neighbours.	There are meetings in the park over there to discuss neighbourly affairs, but he never goes because he doesn't really like talking to people. Maybe he would go if he was younger, but not now. He has grandchildren so maybe he would go with his grandchildren. He's been living there for 30-40 years, and he said that the neighbourhood has changed, there is not as much respect as there was back then.
8	Male, 30 years old, 5 months of residency	This gym under the metro because he really like to do sports.	x	It was mostly in the Church (victory outreach) and it's also where he helps other people there spreading words. They give him food.

	INFO	FEELING AT HOME	HELPING	MEETING
9	Female, 30-35 years old, 4 years of residency	Nowhere, she doesn't really like the neighbour-hoods. She was saying that when she was looking for houses to live, she didn't really want to live in Rotterdam Zuid because of reputation, and at some point she found this house and now she's OK with it. She thinks that her street is OK but if you go more to the West, it gets more ghetto-li-ke.	She doesn't really help peo-ple, but one time was helped by someone when she locked her-self out of her house There's a han-dyman in her in her street She's friendly to her neighbors, she says hi and people say hi back.	Maybe some neighbours, but she's rather not going anywhere She goes to playgrounds with her child-ren, mentioned not paying for the fenced one in the middle of Tarwewijk. She then sometimes bring a friend, otherwise she doesn't speak to neighbours.
10	Female, 12 year old, 12 years of residency	She goes to this dancing school house for urban arts. It's next to her school, she has a dancing group there but sometimes she also goes to Millinxpark.	There was one situation when she or her pa-rents helped someone hang on a TV.	At school and also they most-ly hang on the street. Mostly around dirk, when it gets darker closer to home, sometimes on the playgrounds.

	INFO	FEELING AT HOME	HELPING	MEETING
11	Male, 30 years old, 1 year of residency	He goes to this café / bar near the place, with beer and music, other places he feels at home is mostly in the centre of the city.	Rarely, but one time he helped a kid fixing his bike.	He said, speaks to neighbours sometimes, very little, he doesn't know people personally and he became friends with a couple in his streets, but they moved away last year so he doesn't speak to them anymore.
12	Male, 40 years old, 27 years of residency	Close to the police station, it feels more safe there so he feels more at ease.	Through House of Hope, he meets other people by helping out with cooking and occasionally having a chat with them.	At Dirk, he meets many neighbours, but of course, he also gets to know a lot of people through House of Hope.
13	Male, 40 years old, 10 years of residency	He feels most at home at House of Hope, where you can have free (evening) meals with people who, among other things, struggle with issues like loneliness. According to him, this place truly provides a family feeling.	Through House of Hope, he meets other people by helping out with cooking and occasionally having a chat with them. He is convinced that kindness and having conversations with people are what they need, and he hopes this will improve the atmosphere in the neighbourhood.	At Dirk, he meets many neighbours, but of course, he also gets to know a lot of people through House of Hope.

	INFO	FEELING AT HOME	HELPING	MEETING
14	Male, 30 years old, 4 years of residency	At the soccer field on the edge of Tarwewijk.	He doesn't.	He mainly meets his friends at Zuidplein, which he thinks is fine, and therefore, in his opinion, Tarwewijk doesn't really need anything. He doesn't have much contact with the neighbours; sometimes he says hello, but sometimes he doesn't.
15	Female, 55 years old, 7 years of residency	She feels most at home at the playground in Tarwewijk, where she sometimes goes with the children who come to visit. She can also have a cup of coffee there.	Not really in Tarwewijk, but in Charlois, yes. But not anymore now.	She knows three Turkish women in the block, but there is a language barrier.
16	Female, 16 years old, years of residency unknown	Everywhere, it's "HIS" neighbourhood. When the weather is nice, he goes to the playground/parks.	He helps direct neighbours when they ask for assistance, as well as people on the street. In fact, he tries to help wherever possible.	He knows the direct neighbours and people on the street.

	INFO	FEELING AT HOME	HELPING	MEETING
17	Male, 45 years old, 27 years of residency	He particularly shared a lot about the experience of the neighbourhood from the perspective of his children. He has, among other things, a son with a disability (not sure what kind of disability).	He has been volunteering at a soccer club for 11 years, specifically for young children/youth with disabilities. He has helped many young people off the streets by getting them interested in the soccer club. Children/youth with disabilities also struggle in the neighbourhood. Often, parents keep their children at home out of shame, which makes it even harder for them to integrate into society. By "disabilities," he also refers to learning delays, which are common in the neighbourhood.	He was hanging out with some friends around a store across from Dirk.

	INFO	FEELING AT HOME	HELPING	MEETING
18	Female, 26 years old, 2 years of residency	At the market in the Afrikaander-buurt. When asked if she enjoys taking a walk around the neig-hbourhood, she immediately replies, "Oh no, I never walk here, there's nothing interesting to see."	Not really, alt-hough she has been to 'Buurt-Buik' twice. It's an initiative in the neighbour-hood where lef-tover food from the market can be taken for free, and a meal is cooked for people in the neighbourhood. She mentions that it mainly attracts older people.	She mentions that she doesn't find Tarwewijk a pleasant neigh-bourhood, and therefore, she doesn't really meet people there. She has the impression that there are many groups in the neigh-bourhood. You either belong, or you're left out. That's why she prefers to go somewhere else to meet people. She mentions that she would like to see so-mething for her age group to do in Tarwewijk. If only something "interesting" could be organi-zed that is sui-table for young adults, such as a place for so-cial activities.

	INFO	FEELING AT HOME	HELPING	MEETING
19	2 Male & 1 female, 12 years old, 12 years of residency	They feel most at home at the playground association and the playground near their house. They say, "The neighborhood is fun and dangerous." When we ask further, they mention that a lot of illegal fireworks are being set off by other kids in the neighbourhood, and they find that scary. They themselves say they are not involved with fireworks, except for one of the boys, but only on New Year's Eve.	x	They meet people outside of school at the mosque at Wolphaertsbocht and at Maashaven.
20	Male, 15 years old, 3 years of residency	He feels most at home in Rijnhaven, on the street with his friends. They have lived in Tarwewijk for 3 years, along the metro line, near Maashaven.	Mainly through small gestures, such as holding the door open for older people (neighbours).	He goes to school at Olympia College, behind the Feyenoord training camp. He occasionally has contact with the neighbours, mainly just saying hello.

	INFO	FEELING AT HOME	HELPING	MEETING
21	Female, 50 years old, 20 years of residency	She feels most at home at the church.	She mainly helps her neighbours, for example, by doing groceries for them sometimes.	She knows many people in the neighbourhood and has mainly met people at the church in the past; this was her main social network in the area. The church is no longer in the neighbourhood.
22	Male, 50 years old, 12 years of residency	He feels at home everywhere, especially at the school where his children go. He is unsure about moving. According to him, there is a lot of turnover in the neighbourhood because many migrant workers live there.	He has taken an active role in the neighbourhood himself. He has been working on a social plan at Mijnherenslaan for 3 years. There, he set up a "neighbourhood garden" near his house with picnic benches, a water point, and more. He tries to help his neighbours wherever he can.	He participated for the first time in a dinner for people from the neighbourhood (Wevershoek). He also goes to the community centre at Millinxpark.

	INFO	FEELING AT HOME	HELPING	MEETING
23	Male, 50 years old, 8 years of residency	Nowhere. He mentions that this is partly due to the lack of greenery; it's so grey and dull that it makes people feel hopeless, he says. In the past, he lived in a much greener environment in The Hague. He would love to see Kralingse Bos in Rotterdam again, but he also understands that it's unrealistic. He complains about the poor maintenance of the green public spaces (both parks and playgrounds) that do exist.	He himself initiated a neighbourhood chat. He has also helped people in the neighbourhood with legal matters for a while. He is a lawyer himself and mentions that people sometimes seek him out through others when they need help. In that sense, he is somewhat "known" in the neighbourhood.	He doesn't have much contact with others in the neighbourhood. That's why he often says he would like to move, but it's difficult at the moment due to housing prices. However, he also mentions that he has no desire to get to know others in the neighbourhood; he only uses his home to "sleep."

|	INFO	FEELING AT HOME	HELPING	MEETING
24	Male, 50 years old, 25 years of residency	He feels most at home at the Ice Cream shop on the corner across from Dirk. It's closed in the winter, but in the summer, when the weather is nice, he enjoys going there.	Years ago, before the pandemic, he helped at House of Hope. He likes to help others, but mentioned that some people misunderstand him.	He doesn't know many people in the neighbourhood. He doesn't have active contact with the neighbors. He meets his friends mainly at food spots in the neighbourhood, including the Ice Cream shop, but also at the shawarma place nearby, as he is friends with the owner.

Mapping of interview themes

As part of the street interviews conducted in Tarwewijk, participants were asked to identify specific locations on a map of the neighborhood in response to the interview themes. These themes corresponded to the key questions explored during the interviews:

- Where do you feel most at home in the neighborhood? (pink)
- Where do you meet others in the neighborhood? (blue)
- Where have you provided or received care? (yellow)

Using a printed map of Tarwewijk, participants were invited to point out places that held personal significance or where they experienced these interactions. Their responses were carefully recorded and later visualized into a collective map (figure 14), showing clusters of activity and highlighting areas that serve as informal care nodes or social hubs within the neighborhood.

This visualization provides a spatial representation of the lived experiences shared by residents, revealing patterns in how spaces are used and perceived. The mapped data has been further analyzed in the research to explore the spatial dynamics of care and connection in Tarwewijk. By linking these insights to specific locations, the map offers a valuable tool for understanding the role of place in fostering social cohesion and care practices.

Fig. 14 Map .of spaces mentio-
ned during the interviews.
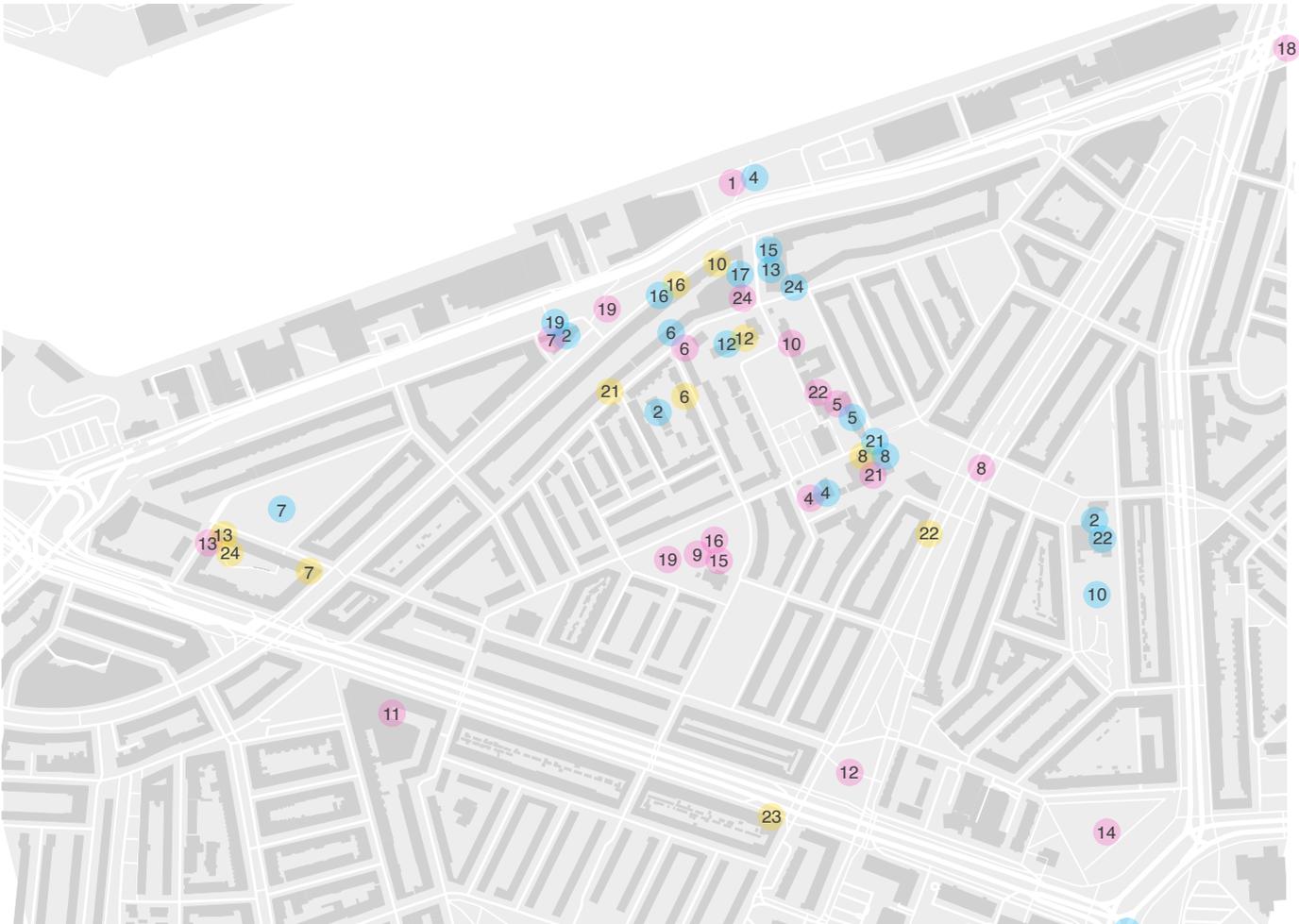
REFLECTIONS

The fieldwork documented in this booklet was undertaken to explore the social and spatial dynamics of care within Tarwewijk. Central to the research was the concept of care nodes, specific spaces that function as hubs for care-related interactions. By examining these nodes, the fieldwork aimed to uncover the ways in which urban environments can foster or hinder informal and formal networks of care.

The process was collaborative, involving coordination with fellow students who brought complementary perspectives. This teamwork enriched the understanding of the neighborhood while maintaining the individual focus of the research. Privacy and ethical considerations were integral throughout, with pseudonyms used and sensitive information handled responsibly.

Reflecting on the process, several challenges emerged due to the complex and sensitive nature of studying care networks. One primary challenge was encouraging residents to participate in interviews and share their experiences. The qualitative nature of methods like interviews and participant observations also carried inherent risks of bias. As a researcher, it was essential to remain mindful of personal interpretations and preconceptions that could influence how observations were recorded or how questions were framed. Similarly, participants may have shaped their responses based on perceptions of the researcher, potentially limiting the depth or authenticity of the data collected.

Additionally, the fieldwork was conducted over a relatively short period and focused on specific locations identified as potential care nodes. This necessarily excluded other parts of the neighborhood where care interactions might also occur, limiting the scope of the findings.

Despite these challenges, the fieldwork in Tarwewijk was a deeply enriching experience, both professionally and personally. Immersing myself in the neighborhood's social fabric revealed the intricate dynamics of care within urban spaces. It also underscored the importance of empathy, adaptability, and reflexivity, not only as a researcher but also as a designer.