



Housing as community infrastructure: an analysis of senior cooperative housing using the capability approach

Zoe Tzika¹ · Carla Sentieri-Omarrementeria¹

Received: 21 May 2024 / Accepted: 15 October 2025 / Published online: 20 November 2025
© The Author(s) 2025

Abstract

Over the last decade, Barcelona has witnessed the emergence of a cooperative housing movement, known as the grant-of-use model, spurred by the socio-political context following the global financial crisis. This bottom-up initiative appeared to primarily address the demand for affordable and adequate housing while responding to demographic shifts and the evolving residential needs. Groups within this model advocate non-speculative housing as a collective endeavor, with residents actively participating in decision-making, reimagining dwelling arrangements, and emphasizing care within communities. Senior cooperative housing has emerged within this context, making a paradigm shift for communities of adults over 55 years old. This study examines how a senior cooperative housing project in Barcelona navigates the key factors that facilitate or hinder the fulfillment of its collective housing goals. Employing the Capability Approach as a conceptual framework, the research explores the motivations driving the community, the resources available to the group, and the role of conversion factors in influencing the project's trajectory. It further investigates how the community responds to planning and implementation challenges through collaboration and adaptive strategies, and how this collective process expands their housing capabilities. By addressing these dimensions, the study aims to deepen the understanding of cooperative housing models, illustrating how such initiatives foster agency, care, and inclusivity in housing provision. The findings offer insights into the broader implications for housing policy and practice, highlighting the potential of cooperative models to reconfigure the landscape of senior living.

Keywords Grant-of-use · Cohousing · Affordable housing · Collaborative housing · Care · Participation

✉ Zoe Tzika
ztzika1@upv.edu.es

¹ School of Architecture, Universitat Politècnica de València, Valencia, Spain

1 Introduction

The recent rise of housing cooperatives in Barcelona is situated within the socio-political aftermath of the economic crisis. Spain's housing crisis is evidenced by the significant increase in evictions (García-Lamarca, 2023) and the persistent challenges encountered by different social groups in securing affordable and decent housing (Pareja-Eastaway & Sánchez-Martínez, 2017). Moreover, demographic changes, evolving lifestyles, and what is termed the 'crisis of care' (Fraser, 2016) have instigated a quest for alternative forms of dwelling. In a housing culture traditionally characterized by high rates of private ownership, particularly prevalent in several southern European countries (Allen et al., 2004), models of collective ownership constitute a novel approach. In recent years, we have observed the emergence of alternative models of (1) property, (2) management, and (3) housing developments, such as cohousing, self-help models, and self-promotion initiatives (Tummers, 2016). Housing cooperatives operating under the 'grant-of-use' model in Barcelona (Etxezarreta et al., 2019) are an attempt to integrate these three typically segregated aspects of housing (Lacol et al., 2018). The case study of these initiatives provides insights into their socio-spatial conceptualizations within the local housing context and enables comparisons with international cases (Khatibi, 2022a). This exploration sheds light on new dwelling cultures and offers valuable perspectives regarding responses to contemporary housing issues.

The rise of this type of housing has followed an international trend of collaborative housing formats across Europe (Czischke et al., 2020). These alternatives to both market-driven and state-provided housing (Thörn et al., 2020) involve communities self-organizing to secure access to housing and establishing collective forms of property (Vestbro, 2010). The dominant market-oriented housing system, in addition to being financially burdensome for many households, restricts the range of dwelling options available in terms of typologies, property models, and individualized responsibility for care and reproductive work (Power & Mee, 2019). In response, the cooperative housing model endeavors to establish non-speculative alternatives, prioritizing the right to long-term, secure housing rather than ownership and profit-making (Ferrerri & Vidal, 2021). Moreover, it reduces the need for private domestic spaces by incorporating a significant number of communal areas, thereby redistributing domestic work and daily activities (Jarvis, 2011). The impacts on participating communities include more affordable housing solutions (Ehlenz, 2018) that foster ecologically sustainable lifestyles (Chatterton, 2013) and promote community living and mutual support (Arnold & Quintas, 2020).

Despite research addressing the context of Barcelona's cooperative housing movement (Cabré & Andrés, 2018), the governance structure of the model (Girbés-Peco et al., 2020), its policy implications (Ferrerri & Vidal, 2021), and design and affordability considerations (Avilla-Royo et al., 2021; Brysch & Czischke, 2021), the lived experiences, motivations, and agency of the groups involved, alongside the collective processes underpinning the consolidation of this housing model and the variations observed in the different cases, are still not fully understood. This study explores how a senior cooperative housing project, one of the first in Catalonia and the first on public land in Spain, navigates the challenges and opportunities involved in achieving its housing objectives. Using the Capability Approach (CA) as a conceptual lens, the research explores three key dimensions: (1) the motivations and needs that drive the community, (2) the collective process, analyzed through the resources and conversion factors that shape the project's trajectory, and (3) the outcomes,

understood as the expansion of collective capabilities that empower the group to realize its housing aspirations. By addressing these dimensions, this study contributes to a deeper understanding of how cooperative housing fosters agency and enables residents to shape their living environments, offering insights into its potential for influencing future housing models and policies.

2 Housing as a socio-material infrastructure

Housing transcends the conventional understanding of a mere physical space; it exists as both a noun and a verb, implying both the material space and the ongoing process of creating a home (Turner, 1972). From this perspective, the home emerges as a multifaceted concept, encapsulating the social, physical, and emotional dimensions of our lives (Rapoport, 1995). Beyond material characteristics, it assumes meanings that contribute to forming one's personal or collective identity, a feeling of security, and influences one's health and well-being (Reyes et al., 2022). However, it also has the potential to evoke feelings of unease and alienation during times of change or uncertainty (Fernández Arrigoitia et al., 2018). According to Lefebvre (1991), buildings not only have symbolic meaning but also derive significance through people's everyday practices, making them integral components of everyday life. His concept of 'the production of space' underscores that space is continually shaped and reshaped by social, economic, and political processes. Thus, when seen from that perspective, housing is not merely bricks and mortar, but a dynamic entity intertwined with personal lives and the fabric of society.

Based on this perspective, housing is often conceptualized as a socio-material infrastructure (Amin, 2014; Jarvis, 2011). Building on Hayden's (1986) feminist critique of domestic architecture, this view highlights how the spatial organization of the home structures everyday life and mediates relations of care, labor and gender. Within this framework, infrastructures are dynamic patterns that serve as the foundation of social organization (Star, 1999). They have the potential to either enable or constrain activities and, in the housing context, they play a role in shaping modes of inhabiting. Drawing upon feminist care ethics, Power and Mee (2019) extend this discourse by regarding housing as an 'infrastructure of care': a framework that emphasizes the relational and interdependent nature of daily maintenance, health, and well-being (Comas d'Argemir, 2017). In both liberal and neoliberal contexts, caregiving is frequently viewed as a privatized service and an individual concern, overlooking its essence as an activity rooted in interdependence (Parera, 2023). Models of housing that reconsider spatial and relational dimensions, such as senior cooperative housing, prompt a reconsideration of collective support possibilities. Caregiving in cohousing projects is seen as central to sustaining community life and addressing the gendered dynamics of shared living. However, it is important to be aware of the complexities of the power dynamics inherent in shared living environments which may perpetuate inequalities (Fernández Arrigoitia et al., 2023).

2.1 Living in a community

Cooperative housing falls under the umbrella of collaborative housing (Fromm, 1991) or community-led housing (Jarvis, 2015). These terms are often used interchangeably,

although the former emphasizes shared decision-making, while the latter focuses on grass-roots involvement. In these models, residents actively participate in instigating, developing, and managing housing initiatives within a democratic governance structure (Viskovic Rojs et al., 2020). Arnstein's (1969) 'ladder of citizen participation' is a widely acknowledged framework for understanding varying degrees of involvement from non-participation to full empowerment. According to Zimmerman (2000), meaningful participation entails community empowerment, fostering a sense of belonging, and granting members control over the process. Cooperative housing typically blends private and shared areas, often referred to as cohousing (Jarvis, 2011), and frequently incorporates ecological principles (Chatterton, 2013). The creation of communities ranges from bottom-up to top-down initiatives, often supported by third-sector organizations (Czischke et al., 2020), which can be intergenerational or cater to specific age groups, interests, or ideological orientations and identities (Lang et al., 2018). The motivations of these groups often center on social cohesion, mutual support, and intentional community-building, with an ever-present tension between collective and individual autonomy serving as a prominent topic of discussion within these environments.

In recent years, there has been an emergence of senior cohousing projects (Durrett, 2009; Glass, 2019; Scanlon & Fernández Arrigoitia, 2015). Senior cohousing constitutes a distinct category within cooperative housing initiatives and has been the subject of scholarly investigation since 2002, against the backdrop of the increasingly aging population in Europe (Lang et al., 2018). These projects entail intentional communities of older adults who actively participate in envisioning and realizing collective housing arrangements, often with a communal focus and with shared spaces and facilities (Jarvis, 2011). This phenomenon is in response to the ongoing demographic shifts stemming from increased life expectancy and changing family structures, which have led in turn to a growing population of seniors in need of assistance and support (Hudson et al., 2021). These housing models are based on the principles of agency and mutual support. They offer a way of combating the loneliness that often accompanies aging (Scanlon et al., 2021) while also rethinking caregiving practices and relationships (Jupp et al., 2019; Keller Garganté & Ezquerro Samper, 2021). However, financial, legal, and institutional barriers are common challenges for senior cohousing. Baldwin et al. (2019) and Puplampu et al. (2020) note that high development costs and complex legal frameworks hinder progress, while Weeks et al. (2020) emphasize the need for supportive policies.

2.2 The capability approach as a conceptual framework

The CA, as developed by Sen (1999) and Nussbaum (2011), is an alternative evaluative approach to understanding people's freedoms in achieving the things and experiences they have reasons to value. Initially applied to poverty studies, CA focuses on personal and societal transformation, defining well-being in terms of people's capabilities, i.e., the real opportunities they have for pursuing meaningful actions and identities. These capabilities are shaped by access to resources and different conversion factors, which determine the extent to which individuals can transform resources into actual achievements, known as functionings. Moving beyond income-based evaluations, CA adopts a multidimensional perspective of human development, prioritizing what people can do and be rather than utility maximization (Robeyns, 2005). In addition to being individual, capabilities can also be collec-

tive, arising from group agency and social cooperation (Ibrahim, 2006; Leßmann, 2022). In their housing research, Clapham et al. (2019) argue that CA shifts the focus from objective assessments of housing conditions to the freedoms people have to shape their living environments in meaningful ways. According to this perspective, housing is not merely a commodity or physical resource but a dynamic space where agency and choice are exercised. Although CA has been applied in urban planning and the built environment, its use in the field of housing is relatively recent (Coates et al., 2015; Haffner & Elsinga, 2019). Kimhur (2020) advocates an approach that expands individuals' capabilities by addressing housing inequalities and the impact of financialization rather than simply ensuring access to housing.

CA also aligns closely with participatory approaches (Biggeri et al., 2018; Clark et al., 2019; Martinez-Vargas et al., 2022). Alkire (2002) highlights this connection by noting that (1) both approaches empower participants and foster outcomes; (2) decision-makers are as important as the decisions themselves; (3) participatory processes do not always produce optimal choices but do help prioritize relevant alternatives; and (4) they facilitate reasoned deliberation, enabling interpersonal comparisons and informed decision-making. Attempts to operationalize CA in housing studies have introduced key concepts such as 'housing capabilities' (Frediani, 2015) which integrate choice, ability, and opportunity in shaping housing outcomes. Frediani (2021) further explores the socio-material dimensions of CA and argues that housing outcomes arise from the interplay between physical resources and social factors, including participation and collective agency. His work highlights that CA goes beyond evaluating housing conditions and examines the broader processes and institutional structures that shape them. In this respect, CA offers a comprehensive framework for analyzing cooperative housing projects both as a collective goal and as a participatory process. It offers a structured lens to examine the groups' motivations, as well as the factors and processes that shape their agency in pursuing and realizing their shared housing aspirations.

3 Methodology

The research adopted a qualitative case study approach (Groat & Wang, 2013; Yin, 2018) to explore Can70, the first senior cooperative housing initiative in Catalonia and the first such project developed on public land in Spain. The case was selected for its innovative character and its potential to shed light on emerging housing models. Fieldwork was carried out in two phases: January to April 2023 and October 2023 to January 2024, employing in-depth interviews, document analysis, and attendance at public presentations and round-table discussions. These complementary methods enabled data triangulated and contextual understanding.

Participants included residents and external facilitators selected using distinct sampling techniques. To be eligible, participants had to have been actively involved in key project phases. Residents were invited via email, resulting in three volunteers: two in the first round and one in the second. Two facilitators and one architect, identified due to their central roles in the project's development, were contacted directly. Interviews with residents were conducted in person and lasted 120–140 min, while those with facilitators and architects were primarily conducted via video calls lasting 30–80 min. All participants provided informed consent, with confidentiality and anonymity ensured.

Interview guides explored the group's formation and evolution, motivations, participatory processes, architectural decisions, collaborations, the role of intermediary entities, and challenges. Document analysis included competition briefs; project dossiers; reports provided by the group; presentations outlining the project's phases and characteristics; and architectural documents, including technical drawings and reports from participatory workshops. Data from public presentations and roundtables further enriched the research. The researchers attended events organized by intermediary entities, Can70, and sector-wide organizations, including recruitment presentations and discussions about senior cooperative housing in which Can70 members shared their experiences. A reflexive stance was maintained throughout the study, recognizing researchers' positionality and potential influence on the research process (Attia & Edge, 2017). This involved both prospective reflection (considering how the researcher's presence, background, and interactions might shape data collection and interpretation) and retrospective reflection (examining how field engagement and emerging data might influence analytical choices).

Data analysis followed an abductive approach (Tavory & Timmermans, 2014), combining theory-informed inquiry with openness to emerging empirical insights. The CA served as the conceptual starting point, informing the formulation of the analytical categories. As the research progressed, these categories were continuously refined to better reflect participants' narratives. Data were coded in multiple stages using NVivo software to systematically engage with the material. Codes were aligned with dimensions resonant with CA while remaining responsive to emerging concepts. This iterative process led to the formulation of five final themes : motivations, resources, conversion factors, choices and conflicts, and outcomes, which structure the analytical framework and integrate theoretical and empirical dimensions (Table 1).

Table 1 Final analytical framework developed through empirical analysis and informed by the CA

Themes	Description
Motivations	Aspirations and goals shaping the group's vision of living and dwelling. In cooperative housing, decisions about different aspects of the project are guided by individual and collective values. Motivations evolve through reflection, negotiation and consensus, and steer the group's actions.
Resources	The tangible and intangible means available to the group, including economic, material, educational, cultural, social, and informational assets.
Conversion factors	Conditions and circumstances influencing how groups transform resources into valued outcomes. These include socio-political, institutional, environmental, social, and collective factors that shape access to opportunities and goal realization.
Choices & Conflicts	Collective decisions regarding spatial design, governance, and external collaborations. Conflicts reflect the negotiations and trade-offs necessary to balance individual needs with collective goals.
Outcomes	The conversion of resources, abilities, and choices, shaped by the group's values and motivations, enables the expansion of collective capabilities (real opportunities to achieve valued goals) and leads to the realization of valued achievements. Outcomes emerge across spatial, relational, and institutional dimensions.

4 Background of cooperative housing in Barcelona

The cooperative housing concept is not new in Spain. It emerged in the early twentieth century when rural populations began to move to urban areas and set up housing cooperatives to build affordable, decent housing (Fernández & Miró, 2016). In this first period, the cooperatives operated like housing developers: once construction was completed, the ownership of the apartments was transferred to individual households. The cooperatives did not usually pursue any activities beyond construction. The second wave of cooperative housing began in the late 1960s. It stemmed from grassroots initiatives that ranged from consumer cooperatives to religious groups during the final years of Francoism. The movement gained momentum in the 1980s but was then more related to syndicates or neighborhood movements and focused on reducing intermediary costs in order to build affordable housing. As in the previous phases, once construction was finished, ownership of the apartments was transferred to the households, and only a few cooperatives continued to be communities of owners.

The present-day wave of cooperative housing in Spain that began in the early twenty-first century is known as ‘grant-of-use.’ This model references international examples of cooperative housing, such as the Andel cooperative housing in Denmark (Bruun, 2018) and the mutual-aid housing cooperatives in Uruguay (Vidal, 2018). Housing movements gained prominence in Barcelona in the wake of the financial crisis of 2008 and the anti-austerity movement, also known as 15M. Some movements, such as the organization Plataforma de Afectados por la Hipoteca (Sala et al., 2018), sought to combat evictions, while others aimed to find alternative housing models (Scheller & Larsen, 2019). Rural housing cooperatives, like Cal Cases and the first intermediary entity, Sostre Civic,¹ had emerged in Catalonia a few years earlier. However, it was in 2012 that a grassroots group from Barcelona’s Can Batlló neighborhood movement (Cabré & Andrés, 2018) reclaimed public land under the grant-of-use model to develop a housing cooperative. By 2015, they had reached an

¹Sostre Civic is a cooperative that facilitates grant-of-use cooperative housing projects. This type is com-

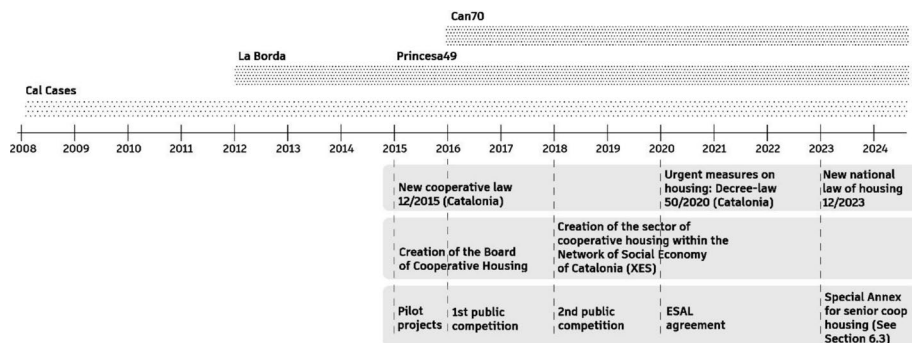


Fig. 1 Timeline of cooperative housing development under the grant-of-use model

monly referred to as a secondary cooperative, project cooperative, umbrella cooperative or intermediary entity.

agreement with the city council for the first two pilot projects, La Borda and Princesa49, led by Sostre Civic (Fig. 1).

After this initial experiment proved successful, the city council launched two public architectural competitions to allocate public plots of land to cooperatives in the following years. However, this process was considered competitive by cooperatives, contradicting their values. In response, they suggested the creation of an agreement with non-profit entities (*Conveni ESAL*²) under which Barcelona city council would allocate plots to a board consisting of representatives from the non-profit housing sector, cooperatives and the XES.³ The idea was for cooperatives to submit projects and the board to allocate land according to specific criteria. Non-profit organizations belonging to the Catalan XES would act as facilitators for groups seeking to develop cooperative housing projects by encouraging networks and alliances. With this framework in place, many projects were developed in the following years, and the model grew and became consolidated. A favorable political context facilitated this growth which was underpinned by legal framework, new laws, and regulatory amendments.

One crucial difference from previous waves of cooperative housing in Spain is that the land remains publicly owned or collective, and cooperative members are granted long-term rights to use it (Cabr  & Andr s, 2018; Etxezarreta et al., 2019). This prioritizes the use of housing over its market value and lends weight to non-speculative housing and the de-commodification of housing (Leyva del R o, 2022). Another distinction is the increased involvement and agency of residents throughout the project's lifespan (Avilla-Royo et al., 2021) with emphasis on governance and democratic decision-making (Viskovic Rojs et al., 2020). These initiatives also promote inclusivity by partnering with public administrations and requiring residents to meet social housing criteria (Ferreri & Vidal, 2021). As the model scales up, it aims for greater geographic and spatial variations and the inclusion of a wider range of social groups (Tzika et al., 2023). Cooperative housing projects vary in terms of social composition (age, gender), number of units, land access (private or public), relationships with institutions, project initiation (resident-led or externally driven), external collaborations, and the expression of group identity.

Since 2010, several senior cohousing initiatives have emerged across Spain, mainly on privately owned land thereby calling for collective land purchases (L pez & Estrada, 2016). Rojo-Perez et al. (2022) examine the challenges and opportunities of senior cohousing and emphasize the role of local policies and cultural attitudes in shaping these communities. Their research provides insights into the broader landscape of Spanish cohousing and is particularly important for understanding the growing adoption of the grant-of-use cooperative housing model in Catalonia. In recent years, the first senior cohousing projects under this model have appeared in this region: three are being built and several more are being developed. This study will focus on Can70, a pioneering project that has set a precedent for future initiatives.

²The initials ESAL stand for *Entitats Sense  nim de Lucre* (Non-Profit Entities), and *Conveni ESAL* can be translated as the Agreement with Non-Profit Entities.

³*Xarxa d'Economia Solid ria* (social economy network) is a network of social economy organizations and businesses devoted to fostering cooperation.

5 The case study: grant-of-use cooperative housing project for seniors

Can70 is a cooperative housing project for people aged over 55 designed to promote active aging in a supportive community. It originated in late 2015 when a group of friends, concerned about their future as they got old, began discussing shared housing as an alternative housing model (Fig. 2). They decided to join the secondary cooperative Sostre Civic, that was the benchmark in cooperative housing in Catalonia at that time. As more people joined, Can70 was established according to a lifelong model enabling members to live in cohousing until the end of their lives. Can70 became the first senior cohousing project in Barcelona and the first to be developed on public land in Spain. Members have the usufruct of their home, with the land and building reverting to the municipality after 99 years.

A key milestone in the project came in 2021 when the publicly owned plot of land was allocated to Sostre Civic for them to manage and they then decided to ‘give’ it to Can70, with Sostre Civic becoming more actively involved in project development. That same year, Can70 and Sostre Civic organized an architectural competition and invited three firms to submit proposals within one month. To be eligible, candidates had to belong to Sostre Civic’s network of collaborators, mainly entities in the solidarity economy, and have experience in senior housing and residential projects. The jury consisting of two members of Can70, two representatives of Sostre Civic and an architect from the COAC⁴, evaluated the projects submitted according to their technical quality and match with community values. Peris+Toral was selected to lead the architectural design process. The competition terms required the architects to conduct a participatory process in which they would co-design the project with members of the cooperative and specified that the initial proposal would be “a starting point subject to modification.” From April to September 2022, nine participatory workshops were held about such subjects as dwelling, sharing, environmental performance, programmatic needs, facilities, materials and costs.

In March 2023, the group completed a special appendix to the ESAL agreement (explained in detail below) to ensure the formal recognition of senior cooperative housing under the grant-of-use model. At this point, the project had already undergone years of internal work but only after securing the land did it admit new members, growing from 16 to 24 individuals. In 2024, the group began admitting more new members with a view to achieving the final number of 39 participants before construction began. To become a member of Can70, an initial financial contribution must be made at the outset, refundable upon departure, which collectively represents around 20–25% of the total development cost. The remainder must be financed by a bank loan. Upon taking up residence, members pay a monthly fee plus another amount for shared services (Table 2). After an eight-year journey

⁴ Catalonia’s association of architects

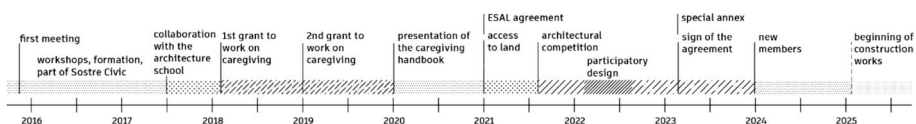


Fig. 2 Timeline of Can70 development

Table 2 Characteristics of the Can70 project

Type	Senior cooperative housing
Location	Barcelona urban area – Sarrià neighborhood
Number of units	39
Number of occupants	39
Construction	New building
Construction system	Compressed earth blocks
Land access	Usufruct of public land with 99-year leasehold
Site area	1.020 m ²
Total floorage	3.150 m ²
Common areas	750 m ²
Size of apartment	30 m ² or 45 m ²
Initial contribution	30.000€—35.000€ approx
Monthly fee	700€—800€ approx
Monthly shared services	300€ approx

of planning, growing, and negotiating, the group expects to complete construction and begin occupying the cohousing within three years.

6 Results and discussion

On the basis of iterative data gathering and analysis and the framework established earlier, we focused on understanding the group's motivations, the resources at their disposal, and the conversion factors, i.e., conditions, skills, and capacities. Throughout the analysis, attention was paid to the conflicts and key moments that provide opportunities for negotiating and dialogue within both the group's internal dynamics and collaborations with other entities. The analysis culminated with an examination of current outcomes, thus highlighting the links between the relational, physical, and institutional dimensions of the housing project.

6.1 Motivations

Our analysis began by identifying the housing objectives of the Can70 community. We pinpointed four key motivations driving the group. First, a strong desire among members not to burden their families as they grew older. Having experienced the challenges of caring for their parents, they were determined to avoid a similar situation themselves. In the words of one member, “We did it for our parents, but we don’t want our children to do it for us.” Second, the group’s concerns about unwanted loneliness in the later stages of life: “Loneliness is one of today’s great diseases, and we refuse to succumb to it... Many older people die alone because they don’t have anything or anyone to lend them a hand.” In addition, several group members currently live alone, another reason for them wanting to create a cohousing community. These reasons coincide with international findings (Glass, 2019; Hudson et al., 2021) that underscore the importance of senior cohousing as a solution for social isolation among older adults.

Apart from their initial motivations, the group felt that there was a lack of housing options to meet their specific needs currently on the market. Housing options for seniors

consist mainly of public or private senior residences, which members criticized for several reasons. Concerns were raised about autonomy, inadequate living spaces, affordability, and limited availability. Members expressed dissatisfaction with the lack of participation in decision-making processes concerning everyday living which they felt contributed to a sense of institutionalization that undermined their well-being. This discontent extended to the gap perceived between the quality of available spaces and their actual needs. In terms of affordability, private senior residences were considered prohibitively expensive, while public options were limited and often involving long waiting periods for admission. Consequently, the group emphasized the importance of active participation in decision-making and playing an active part in their community as they get older: "Our aim is to live with dignity, organize our own lives and try to make this replicable. "

In addition to their desire for self-determination in daily life, the group was driven by the aim of ensuring their project's replicability. They envisioned it as a collective initiative of social that promotes the right to use dwellings rather than private ownership, reinforcing its non-speculative nature. Notably, their motivation was not the result of a lack of housing because most members already owned homes. Rather, they aimed to create a community providing support for seniors, a concept previously absent from Spain's housing landscape. This approach differs from previous grant-of-use housing cooperatives, which focused mainly on the unaffordability of the housing market, and highlights the group's main focus on fostering a sense of community and mutual support for aging persons. Parera (2023) highlights the importance of interdependence and how community well-being significantly impacts individual well-being, challenging traditional views on senior housing and advocating its integration into community infrastructure. Casanova (2023) reinforces this view, emphasizing the need to build neighborhood networks of mutual care and social support, particularly for the elderly, to ensure long-term well-being and autonomy.

6.2 Resources

Resources are the means available to a group, including both tangible assets, such as educational and economic resources, and intangible assets, such as cultural and social capital. Within cooperative housing initiatives, resources play a pivotal role in shaping outcomes and facilitating progress. From the group's formation to the accomplishment of its objectives, the strategic use of resources is fundamental. This section explores the diverse resources mobilized by the community and their impact on the project.

According to Lang et al. (2020), intermediaries and support entities play a key role in empowering cooperative housing groups. In the Can70 case, Sostre Civic functioned as a key resource, acting as a legal structure for the group, facilitating communications with the city council, helping with legal and financial matters such as access to land and grants, and providing guidance about group dynamics and architectural factors. Before joining Sostre Civic, members knew little about concepts such as 'cooperative housing,' or 'the right to housing.' The organization served as a platform for connecting individuals interested in senior cooperative housing and supporting the learning process. Some members took the initiative and organized a series of workshops focused on senior cohousing, which led to the creation of Can70. As one member said, "We gathered five people and designed three training sessions for those interested. Although the training was experiential and could be seen as somewhat informal, it enabled many valuable contacts." The group also sought advice

from Perviure, a cooperative that provides support for cooperative housing groups, and took part in six workshops about group dynamics, which helped them develop their governance model.

After the group was formed, informational resources proved essential. Regular meetings became places for sharing ideas and the group actively researched alternative housing models: studying existing senior projects, conducting collective brainstorming sessions, and sharing literature to focus their vision. They examined national and international cases, particularly those about caregiving which became central to their planning. Notably, the group consisted mainly of single women, many with backgrounds in healthcare, who could possibly contribute to this emphasis on care. Influential sources, such as the report *Architectures of care: Towards an activist ageing* (Mogollón García & Fernández Cubero, 2016), and the books *Caring: a revolution in the caring of people* (Urrutia Beaskoa, 2018), and *Me, old woman* (Freixas, 2021), helped them synthesize the key concepts of senior cohousing and care. This literature provided a deeper understanding of both the tangible aspects of housing, often referred to as 'hard' infrastructure, and the equally significant intangible elements and relationships, referred to as 'soft' infrastructure (Mogollón García & Fernández Cubero, 2016). This collective educational process became essential to the group's development.

In view of the importance of networks and partnerships, the group engaged with the public authorities, universities, and the solidarity economy. Leveraging their social and cultural capital, they communicated their goals effectively and forged connections. Members with backgrounds in public service and education facilitated interactions within the authorities by identifying relevant departments and establishing collaborations. The department responsible for services for older adults expressed a particular interest in their focus on support for older populations. As one member said, "We were looking at the subject of care, and the city at that moment was interested in (integrating) care." In 2019, the group secured a grant to explore new approaches to mutual support and well-being in cohousing for older adults. The grant was extended for an additional year, allowing them to organize these ideas into a guide. Four working groups were formed, each addressing a different area: mutual support, continuity of assistance, mourning and death, and the economy of care. This process led to the publication of *Cures en la convivència de persones grans*, a handbook about caregiving in senior cohousing, (Can 70 et al., 2019)⁵ which was publicly presented and is available on the Sostre Civic website. The group also collaborated with a semester-long design studio in which architecture students developed the design of the project and were introduced to architectural concepts. These activities increased the project's visibility, strengthened collaborations, and helped the group define its vision.

Finally, a lack of economic resources can be an obstacle for people unable to cover the initial contribution or the monthly fee. The group admits that the project costs are not affordable for all older adults. To address this, once the loan is repaid, they intend to continue paying the monthly fee, part of which will cover maintenance costs, while the remainder will fund the creation of new projects that have lower capital requirements and are thus more affordable. In addition, Can70 actively advocates contributions from the public authorities to support care services in senior cooperative housing, arguing that self-managed care models should receive funding comparable to senior residences whose residents are classified

⁵This work was conducted in collaboration with Lluvi Farré Montalà, then a PhD candidate, who had been closely following the group as part of his research. At the group's request, he acted as rapporteur for this process, drawing up on his expertise and know-how.

as living in. The group is dedicated to furthering the de-institutionalization of care for the elderly and emphasizes the need for public support to ensure the viability and inclusivity of this model. This commitment reflects their determination to develop a replicable model that extends beyond their specific case and is affordable to wider demographics.

6.3 Conversion factors

Conversion factors are the conditions, circumstances, abilities, and skills that help or hamper a group's ability to transform resources into outcomes. These factors shape how opportunities unfold within a community by bridging potential and realization. They span socio-political, institutional and environmental contexts, and collective or individual competencies.

Barcelona's socio-political context provided an environment conducive to such initiatives. At the project's inception, the city had recently launched its first two cooperative housing pilots under the grant-of-use model, stirring a wave of public interest. These efforts were part of a broader shift toward the social and solidarity economy (Cabr  & Andr s, 2018). In 2015, a new law for cooperatives passed in the parliament of Catalonia provided the legal framework needed to facilitate their consolidation. In addition, the cooperative housing movement secured two important regulatory amendments that facilitated the development of forthcoming projects. First, in the municipality of Barcelona, cooperative housing in the sense of a type of social housing was exempted from the mandatory construction of underground parking. Second, a law enacted in Catalonia in 2020 acknowledged that the common areas in cooperative housing were complementary to the private areas, thereby reducing the minimum mandatory floor space of private apartments (see Fig. 1).

Despite these advantages, the project faced institutional challenges, particularly the absence of a framework specifically for senior cooperative housing. The group had to engage with public authorities and explain the project due to the lack of public-sector cohousing initiatives for seniors in Spain. They navigated bureaucratic divisions between the department for senior citizens, which oversaw project programming, and the department of housing, responsible for the allocation of land. The ESAL agreement governing the transfer of municipal plots posed another barrier, as it required members to comply with social housing criteria, such as income thresholds and the condition of not being homeowners, that many members did not meet. Similar legal and bureaucratic challenges have been encountered in international senior cohousing projects (Puplampu et al., 2020; Weeks et al., 2020). The group believed that these criteria should be adapted to senior cooperative housing, and they engaged in two years of negotiations before admitting new members. Finally, an appendix was passed allowing senior groups to be granted public land despite not meeting social housing criteria. Specific conditions accompanied this decision, such as the transfer of their homes' management to the city council for use as social housing at below-market rents, and allowing members to exceed income limits, provided that the group's average income remained below the threshold.

The agreement also imposed specific conditions on the project, such as the requirement to accommodate a minimum of 26 apartments with an average occupancy of 1.5 persons, i.e., a total of 39 occupants, calculated according to the size of the plot. This meant transforming the group into a larger community, a factor that Labit (2015) identified as important for project success. Additionally, the project was required to earmark an area of 264 m² to be managed by the city council and accessible to the public at specific times of day.

Although this aligned with the group's aim of integrating the project into the neighborhood, it also posed challenges due to the limited plot size and increased number of dwellings, which reduced the community spaces envisaged. Furthermore, urban planning regulations restricted the available exterior space and prevented the creation of a rooftop community garden, as the installation of solar panels had to comply with building height restrictions.

Another series of conversion factors concerns the location and the physical characteristics of the plot such as its geometry, size, and slope. The site is located in the Sarrià district, where none of the members had lived previously. The group originally searched for sites in their own neighborhoods, with a view to maintaining social connections, but as they could not find any suitable plots or the land prices were too high, they welcomed the available opportunity. Despite possible concerns about social integration due to future residents not being originally from the area, the group considered ways to actively participate in the community, as will be explained below. In terms of size, the plot was much smaller than they had envisaged, and its geometry constrained the design because it consisted of two adjacent plots that could only be connected through a semi-underground floor, which affected the final architectural result. In addition, the sloping terrain posed challenges for the architectural solution and raised accessibility issues, particularly important for residents who might experience reduced mobility as they got older.

Another key series of conversion factors relates to the group's individual and collective capacities. Fromm (2012) emphasizes that the success of cohousing depends on residents' willingness to collaborate, their commitment levels, and their ability to cooperate, factors influenced by age, health, and financial situation. The group's principles: knowledge, communication, trust, cooperation, commitment, consensus, growth, and celebration⁶, reflect these ideas. From the outset, members prioritized cohesion, conflict resolution, consensus-building, and attention to decision-making. A formal horizontal governance structure was established with the general assembly acting as the central decision-making body where final decisions are taken by consensus. The board, consisting of representatives from five commissions (architecture, economy, community, external communication, and governance), meets before each assembly, while temporary working groups address specific issues as needed (Fig. 3). In addition to formal structures, informal mechanisms played a key role in strengthening social cohesion. Effective communication practices during assemblies, conflict mediation, and the use of WhatsApp groups for specific topics facilitated engagement. The group also emphasized social bonding through leisure activities such as quarterly excursions, community dinners, and celebrations. These structures, both formal and informal, have fostered trust, social cohesion, and sustained member engagement. Despite the lengthy process, members highlighted the importance of allowing time for the project to mature, a gradual development they regarded as crucial for its long-term sustainability.

6.4 Choices and conflicts

The participatory and decision-making process inherently involves conflict management and navigating different outlooks. Jarvis (2019) underscores the importance of examining the qualities of participation and 'togetherness' because effective engagement embraces both

⁶In Catalán, this series of principles is known as the 8 Cs because they all begin with the letter C: coneixement (knowledge), comunicació (communication), confiança (trust), cooperació (cooperation), compromís (commitment), consens (consensus), creixement (growth), and celebració (celebration).

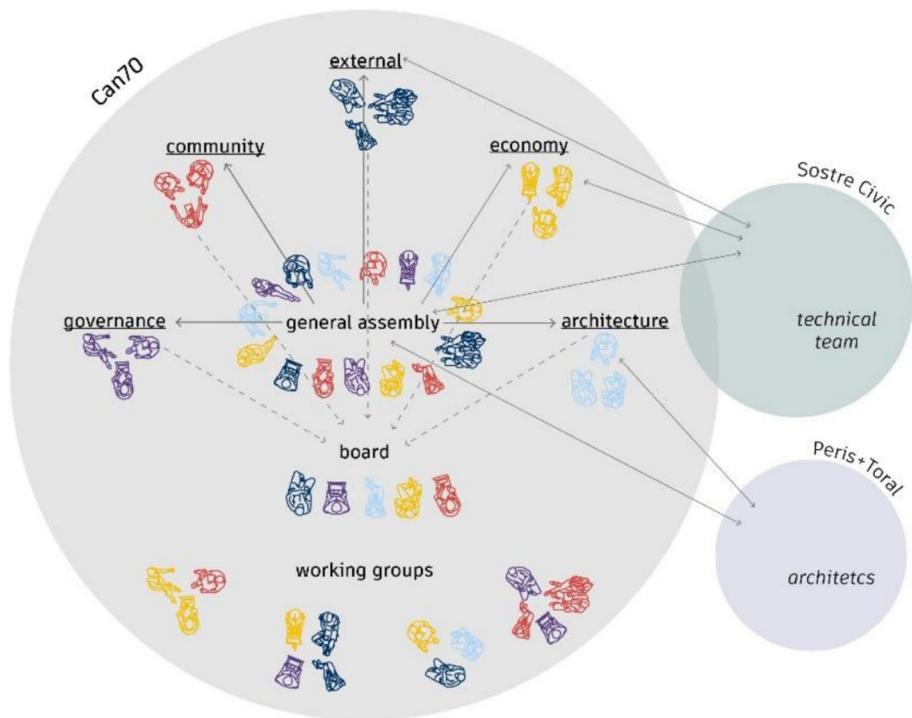


Fig. 3 Organizational structure of Can70

conflict and cooperation. In housing cooperatives, two relational dynamics are particularly important: internal governance to balance individual and collective interests, and external collaborations with intermediaries and professionals. Matters such as managing different priorities within the group or the degree of guidance and intervention from external collaborators must be examined. In our case study, the group has a particularly high level of active participation that probably places it on the upper rungs of Arnstein's ladder of citizen participation (Arnstein, 1969).

Other important aspects are the evolving composition and internal dynamics of the group. Although only two of the original friends remain, once Can70 was formally established, the membership has remained largely stable. While such a prolonged process could suggest fatigue, members attribute departures rather to a lack of commitment, often linked to difficulties in confronting the realities of aging. Maintaining a balanced age distribution has also been crucial for the feasibility of the caregiving model. To address this, the group opted to admit participants evenly across the 55–60, 60–65, 65–70, and 70+ age brackets and deliberately limited older applicants despite higher interest in order to ensure the project's diversity and sustainability, albeit prolonging the selection process. Expanding the group is challenging, particularly as regards the integration of newcomers unfamiliar with the collective journey. However, rather than seeing this as a threat, members regarded it as an opportunity to test the group's resilience and adaptability. Although subgroups form naturally due to the different times when members join, they blur as time goes by. By embracing the new ideas, concerns, and concepts introduced by new members, the group enabled the project

to evolve. Mechanisms to balance individual and collective interests were implemented to ensure that power dynamics such as those stemming from longevity were carefully managed. An umbrella group mediates interpersonal conflicts, while a time bank and well-being circle are used to facilitate mutual-aid equitably and prevent any disproportionate influence or workload. Members emphasized that this process gave them opportunities for personal growth. As one explained, "We started off with an idea. The idea evolved because new people brought in fresh perspectives. It changed. We're always open to new ideas. You must be. Life's better when you keep learning, there's always something to learn. People who join now say, 'Maybe we can do it this way.' And it's true, we hadn't realized. Twenty people always see more than five."

As regards external collaborations, the group initially operated with minimal professional intervention, but once the land had been allocated, the intermediary assumed a more prominent role in decision-making. This shift introduced a new dynamic, unfamiliar to the group, as they moved from the visionary phase to practical considerations. The group acknowledged the need to remain flexible, adapt and compromise when necessary. Two meetings were held per month, one with the facilitator from the intermediary organization. After consulting with *Sostre Civic* or other external entities, the group retained the authority to make the final decision in their general assembly. This autonomous process, especially in determining priorities, allowed them to make well-informed choices while ensuring that their values guided the project's direction. They perceived it as a mutual learning process between them and the intermediary. A delicate balance was achieved through collaboration with *Suara*, a specialized caregiving cooperative. This partnership enabled *Sostre Civic* and the group to gain practical knowledge beyond their expertise, such as the requirements for housing for older adults and accessibility design. However, it also raised concerns about potentially altering the project's character, as strictly adhering to standards for age-friendly spaces risked turning the project into a nursing home. Additionally, there was a reluctance to engage a large-scale care company for professional services, as it could institutionalize the feeling of living at home that was so important to the group.

The participatory process with the architects was another pivotal forum for collaborative exploration. Both residents and architects agree that the experience was very enriching. Residents expressed satisfaction in being genuinely heard, noting that the architects were receptive to their queries. Rather than rejecting ideas outright, the architects investigated the suggestions, presented options, and allowed the group to make the final decision. This was a novel experience for the architects because it enabled them to engage more deeply with the project: a rare occurrence in conventional residential projects with no end-user involvement in decision-taking. They regarded the sessions as educational for the group, and an opportunity to explain the project thoroughly. They observed that the group sometimes proposed more radical ideas, such as a willingness to share more aspects, on a theoretical level. However, this perspective often shifted when decisions were to be made about their individual conditions: a struggle inherent in community-driven projects as members try to balance communal welfare with personal preferences. The architects found it intriguing that the group regarded the entire building as their home, not just their assigned apartment. This resonates with the members' perception of themselves as 'users' rather than 'owners,' reinforcing the communal nature of the project and highlighting the importance of designing for future residents. To explore these nuanced considerations, the architects introduced tools

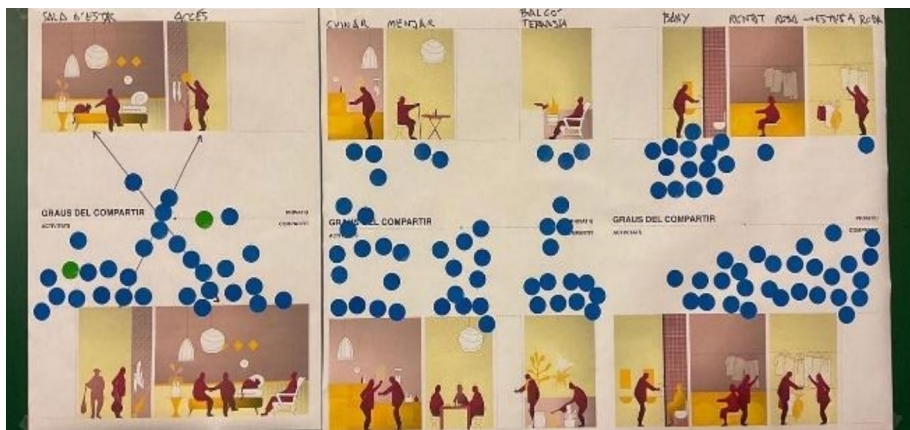


Fig. 4 Visual paradigms used to facilitate discussions about the extent of sharing during the second participatory workshop with Peris+Torral.

Source: Can70

	Introduction Session 1 05-04-2022	Share: Exploring Session 2 19-04-2022	Share: Reflections & Preferences Session 3 26-04-2022	Programmatic Needs Session 4 10-05-2022	Systems & Installations Session 5 24-05-2022	Materials & Costs Session 6 07-06-2022	Internal Layouts Session 7 21-06-2022	Programmatic Needs Session 8 21-07-2022	Final Validation & Costs Session 9 13-09-2022
Focus	Explanation of the project & initial design proposals	Understand participants' preferences of private & shared spaces	Balancing private and collective spaces: group visions	Defining needs: uses, coexistence, & care services	Proposals about energy strategies & active systems (installations)	Construction budget & choice of materials	Adjust interior layouts to meet building codes & user preferences	Refining collective spaces & economic considerations	Final project approval, allowing architects to proceed with schematic design
Participation	-Presentation, -Group Q&A, -Initial reactions	-Presentation -Interactive activity, -Survey	-Presentation -Interactive activity, -Survey	-Presentation, -Group feedback, -Voting	n/a	n/a	-Presentation, -Discussion, -Voting	-Project review, -Group feedback, -Discussion	-Presentation, -Discussion, -Voting
Number of participants	20	20	22	20	n/a	n/a	17	15	15

Fig. 5 Overview of the nine participatory sessions, based on the sessions' minutes

such as surveys and visualizations of different spatial paradigms, sparking discussions about the different options (Fig. 4).

Each of the nine sessions began with the architects presenting their work, followed by a group discussion and concluding with a vote, often between two options suggested by the architects, or the validation of a final decision (Fig. 5). This approach aligns with similar participatory design processes in other housing projects for older populations, such as the collaborative work on the Older Women's Cohousing project in North London (Devlin et al., 2015).

6.5 Outcomes: housing as a community infrastructure

The results of the Can70 project stem from an ongoing process in which resources, abilities, and choices shaped by the group's values and motivations have expanded its collective capabilities to make housing function as community infrastructure. The realization of these capabilities is reflected in spatial, relational, and institutional dimensions, underscoring the interconnected nature of housing, care, and governance. Rather than merely providing shelter, Can70 actively fosters social interdependence, collective agency, and long-

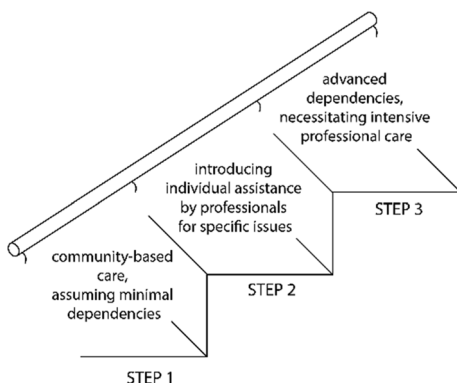
term well-being. The project challenges traditional models of aging and housing provision and demonstrates that cooperative housing can serve as adaptive, evolving infrastructure that sustains social bonds, reconfigures domestic life, and extends care beyond individual responsibility. This aligns with Power and Mee's (2019) conception of housing as an infrastructure of care that facilitates relational interdependence (Parera, 2023).

The shift from individualized living to a model based on collective agency has redefined care structures within Can70. The group's well-being ladder, developed as part of their caregiving handbook, organizes care into three levels: community-based, mutual aid for minimal dependencies; professional assistance for intermediate need; and specialized care for advanced dependencies (Fig. 6). This structure represents an expansion of capabilities, as members are not passive recipients of care but active participants in shaping the conditions under which they will receive it. By defining these parameters collectively, they strengthen their capacity for self-management while remaining autonomous and avoiding the institutionalization typical of conventional senior housing (Parera, 2023). As stated in the handbook "At the beginning, we said: We don't want to be a burden on our families, but over time we've also come to see that we don't want to be a burden on the friends we live with." To support this model, the cooperative plans to offer various services, ranging from professional meal preparation to the management of public space access and administrative tasks. Healthcare services remain the priority, including physiotherapy and daytime nursing to ensure that residents receive essential medical attention at home. A key consideration is the financial structure of these services, whether they will be funded individually, collectively, or partially covered by a solidarity mechanism. This tiered approach allows for a dynamic interplay between autonomy and interdependence, ensuring that as residents' needs evolve, the supporting infrastructure remains flexible. This reconfiguration of care in later life challenges dominant models that rely on either family networks or institutionalized solutions, embedding care within the social fabric of housing itself.

The group plans to organize various activities beyond daily meals, such as musical recitals and skill-sharing sessions. However, they are careful not to impose structured or mandatory participation, ensuring that community life remains flexible and responsive to individual preferences. At the same time, they seek to avoid an overly inward focus by fostering engagement with the broader neighborhood. These intentions align with urban planning debates on preventing the self-segregation of cohousing projects through cross-community interaction (Droste, 2015). Can70 also aims to extend its impact beyond its immediate residents, reinforcing housing's role as a neighborhood infrastructure. One way

Fig. 6 The well-being ladder.

Adapted from *Cures en la convivència de persones grans*: a handbook about caregiving in senior co-housing by Can70, Daniel López and Lluvi Farré (CareNet, UOC). Source: Sostre Civic



of doing so will be by integrating publicly accessible spaces, negotiated through the ESAL agreement with the city council. These will include a physiotherapy room, a reading area, and a community event hall, intended to strengthen ties between the cooperative and the surrounding neighborhood and thus prevent the project from becoming an isolated enclave. By hosting activities such as public presentations, workshops on aging, or storytelling events for children, the cooperative plans to contribute to local networks of care, knowledge, and support (Williams, 2005).

The architectural design of Can70 embodies the group's motivations by proposing spatial configurations that support housing as community infrastructure. The building will consist of two volumes constructed with compressed earth blocks. The site, located on Via Augusta in Sarrià, has several design challenges, including noise from the main street and steep terrain. The architectural proposal addresses these issues by creating an access point leading toward the interior of the urban block, fostering a quieter, more sheltered environment (Fig. 7). The two volumes will be connected by a semi-basement level, that unifies the structure, while communal spaces, together with those planned for public use, will be concentrated on this floor. These spaces will be arranged on both sides, with independent entrances ensuring public access does not interfere with the residential areas, thereby preserving a homely atmosphere. The final use of these areas will be determined collectively once all members have joined and the agreement with the city council is finalized regarding schedules and the involvement of professionals. This design seeks to create opportunities for neighborhood cohesion and generate social connections, as discussed in the literature by Fromm (2012).

The group made a significant design decision regarding private spaces that aligns with their cohabitation model. Each member will live in a separate apartment, regardless of their relationship status. This decision is intended to address emotional challenges, such as losing a partner, and to avoid the need for relocating to smaller apartments as living circumstances



Fig. 7 Urban plan.

Adapted from architectural drawings by Peris + Toral

change. It also reflects the fact that many members are currently living by themselves, contrasting with other senior housing models, which often assume cohabitation with family members. However, the agreement with the city council required accommodation for at least 39 individuals in 26 apartments, posing a spatial challenge due to the limited space available. In response, the architects proposed a cluster arrangement (Alexander et al., 1977) in which each resident has a private 30 m² unit including a bedroom, bathroom, kitchenette, and living area; and shares a 50 m² communal space with three to five neighbors (Fig. 8). These clusters function as semi-private domestic environments that foster social interaction and mutual support while maintaining individual autonomy. Drawing upon international examples from Switzerland, the Netherlands, Austria, and Germany (Khatibi, 2022b; Prytula et al., 2020; Schmid, 2019; Tummers, 2017), the building's design creates varying degrees of privacy ranging from public to intimate spaces. The cluster becomes the 'new family unit' where four or five individuals support one another and engage in shared daily activities such as cooking and dining together. The layout also allows for flexibility, enabling couples or individuals who wish to live together to link two units via a door, made possible through adaptable building materials.

The concept of cluster housing was initially unfamiliar to the group, yet their adaptability and commitment to shared living led them to embrace it. Some members were hesitant to share kitchens, preferring the privacy of conventional apartments. Following many discussions and exchanges of opinions with the architects, the group agreed to combine both options, resulting in a design that includes 29 cluster cohabitation units and 11 conventional apartments, each measuring 45 m² and equipped with private kitchens (Fig. 8). This dual arrangement of housing typologies mirrors international examples (Glass, 2013) of communities featuring different types of units or tenures, an approach that reflects flexibility in accommodating diverse preferences and financial situations within the same project.

The extensive network of communal spaces distributed throughout the building ensures accessibility and engagement on multiple levels. Designed as integral components rather



Fig. 8 On the top: typical floor plan of cluster units, on the bottom: typical floor plan of conventional units.

Adapted from architectural drawings by Peris + Toral



Fig. 9 Ground floor plan with communal and public spaces.

Adapted from architectural drawings by Peris+Toral

than supplementary features, these areas extend the notion of the home beyond private units (Fig. 9), challenging the dominant urban housing model that often isolates domestic life within individual apartments (Vestbro, 2010). Instead, the design advances a vision of housing as an infrastructure of support and shared resources (Fromm, 2012). The ground floor accommodates most of these spaces, including the centrally located multipurpose hall, a dining area, and two additional shared rooms envisaged to be a reading space and a day center. Everyday facilities such as a communal kitchen, workspaces, and a storage room are also located on this level and designed to adapt to future needs. The integration of auxiliary spaces for cleaning staff, security, and building management further supports the cooperative's long-term self-sufficiency. Above the ground floor, shared spaces extend vertically throughout the building, embedding opportunities for socialization in its physical structure. Each floor features semi-open terraces, adjacent to circulation cores, serving as informal gathering spaces. In each of the two buildings, one terrace is designated as a laundry space with communal washing machines and dryers, reinforcing the integration of shared domestic activities. Altogether, communal areas account for 25% of the total building area, rising to 50% when circulation areas are included, one of the highest proportions among Barcelona's cooperative housing projects.

7 Conclusion

This study explores how a senior cooperative group navigates the challenges and opportunities involved in achieving its collective housing goals through the lens of the CA. By analyzing the case of Can70, one of the first senior cooperative housing initiatives on public land in Spain, the research examines three key dimensions: the motivations that drive community participation, the collective processes that shape project development through resources and conversion factors, and the outcomes in terms of expanded collective capabilities.

The members of Can70 were motivated by a shared desire to age with autonomy, avoid dependence on family or institutional care, and resist social isolation. The dissatisfaction with conventional senior housing, often marked by rigid structures and limited participation, led them to envision an alternative: a self-managed, community-oriented environment that would foster mutual support while remaining adaptable to evolving needs. This vision reflects not only personal aspirations but also a critique of systemic inadequacies in existing housing options for older adults. In this way, the study shows that these become the basis for collective decision-making, spatial negotiation, and institutional innovations. Bringing this vision to life required navigating a complex landscape of resources and conversion factors. The intermediary organization Sostre Civic played a crucial role in providing legal, financial, and administrative support. The group engaged in self-formation processes that helped them align group expectations and build their collective capacity. Public funding facilitated the development of a caregiving handbook, formalizing their approach to mutual support. Externally, the group built alliances and participated in advocacy networks to increase visibility and promote senior cooperative housing as a feasible, public-communitarian alternative. While the regulatory environment in Barcelona was generally supportive, the absence of a specific legal framework for senior cooperative housing required negotiations to adapt the ESAL agreement, introducing further procedural and design adjustments. The agreement's requirements necessitated more group and architectural adjustments, while the limited size and conditions of the plot influenced spatial planning. Internally, governance mechanisms and conflict-resolution initiatives played a crucial role in sustaining cohesion and fostering long-term engagement. The participatory process underscored the challenge of aligning individual preferences with collective goals, yet decision-making structures provided a framework for constructive negotiation. Collaboration with professionals, including architects and facilitators, was characterized by mutual exchange and enabled expert input that enhanced the project without diminishing the group's autonomy. This participatory process with professionals was fundamental, facilitating a reciprocal design dynamic in which the group actively shaped their environment, reinforcing collective agency and embedding their social vision into the architecture itself.

The outcomes of the project can be understood as the expansion of collective capabilities that empower the group to realize its housing aspirations. At the community level, this is reflected in the transformation of the concept of housing, from an individual apartment to a shared, evolving infrastructure that supports mutual care and collective well-being. Members came to see the entire building as a their home, balancing individual privacy with community needs. This shift reflects an expansion of collective capabilities, not only in securing housing, but in shaping a supportive environment. Housing is thus conceptualized as a *community infrastructure*: an evolving, adaptable space that accommodates changing needs over time. The dwelling typologies, which combine cluster housing with conventional apartments, along with a spectrum of communal spaces, provide flexible living arrangements that support both autonomy and interdependence, allowing residents to navigate varying levels of care, sociability, and privacy. At the broader societal level, the expansion of collective capabilities is reflected in Can70's efforts to influence not only the immediate living environment but also the systems and structures that shape housing, care, and inclusion more broadly. One manifestation of this outward orientation is the project's integration into the surrounding neighborhood. With the inclusion of public-use spaces and community engagement initiatives, Can70 intends to strengthen social ties beyond the

group itself. In parallel, the group has pursued long-term strategies aimed at increasing affordability and promoting broader access to cooperative housing. Although the project is not yet fully accessible to low-income populations, the group plans to enhance affordability in two ways. First, once the loan is repaid, a part of the future members fees will be used to support the development of new projects with lower entry costs. Second, Can70 engages in policy advocacy for public funding for self-managed care services, similar to the support provided to nursing homes. These initiatives point to a vision of housing and care as collective social responsibilities, challenging dominant paradigms and advancing models that prioritize well-being, agency, and systemic transformation.

From a broader perspective, this study offers insights into how the CA can be operationalized in housing research. It advances a community-centered understanding of housing, one that considers how collective agency can be fostered and how housing can function as a platform for expanding residents' capabilities. By examining how residents navigate institutional, spatial, and interpersonal challenges, the study illustrates that agency in cooperative housing is not an inherent attribute, but a capacity built through organizational learning, negotiation, and participatory governance. Documenting these practices in context highlights the importance of intermediary support, adaptive regulatory engagement, and co-productive professional relationships in enabling residents to materially realize their housing vision. Methodologically, the research provides an analytical framework for studying resident-led initiatives through the lens of the CA. It clarifies how to trace the formation of collective agency by identifying key elements such as group motivations, resources, and conversion factors. This framework highlights key questions and dimensions to be considered in similar contexts to better support the emergence and sustainability of cooperative housing models. Nonetheless, certain limitations must be acknowledged. The focus on a single case limits the generalizability of the findings, and the absence of interviews with members who left the project leaves some perspectives underrepresented. Moreover, since the study examines the process only up to the construction phase, it does not capture long-term outcomes including the cohabitation experience. Future research could benefit from comparative multiple-case studies within Catalonia's cooperative housing model to explore variations in collective agency across different groups. Longitudinal studies would also be valuable in capturing post-occupancy dynamics and providing a deeper understanding of how collective capabilities evolve over time.

Ultimately, Can70 challenges dominant housing paradigms for older adults by presenting a feasible alternative to conventional senior residences, illustrating that aging in a community can be an empowering, agency-driven process. Rather than treating senior housing as a passive service, it demonstrates that housing can be co-produced by its residents, ensuring that it remains adaptable, inclusive, and responsive to their evolving needs. The insights derived from this analysis can guide future cooperative housing initiatives and inform the work of intermediaries, architects, and the local authorities in supporting similar projects. Multi-level support ranging from resource allocation and participatory processes to institutional frameworks can empower communities to create housing solutions that truly respond to their needs. The studied process exemplifies both the complexities and possibilities of cooperative housing and demonstrates that through collective effort, a shared vision, and multilevel support, groups can expand their capabilities, transform their living environments, and redefine dwelling in community-oriented ways.

Acknowledgements We are grateful to the members of Can70 who generously shared their experiences with us, as well as to the facilitators from Sostre Civic who worked with them. We also thank Boram Kimhur for the insightful conversations. Finally, we would like to express our appreciation to the three anonymous reviewers for their valuable contributions.

Funding This research is carried out with the support of the European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement No 956082.

Declarations

Conflict of interest No potential conflict of interest was reported by the author(s).

Open Access This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

References

- Alexander, C., Ishikawa, S., & Silverstein, M. (1977). *A pattern language: Towns, buildings, construction*. Oxford University Press.
- Alkire, S. (2002). Valuing freedoms: Sen's capability approach and poverty reduction. *Oxford University Press*. <https://doi.org/10.1093/0199245797.001.0001>
- Allen, J., Barlow, J., Leal, J., Maloutas, T., & Padovani, L. (2004). Housing and welfare in southern Europe. *Blackwell Publishing Ltd*. <https://doi.org/10.1002/9780470757536>
- Amin, A. (2014). Lively infrastructure. *Theory, Culture & Society*, 31(8), 137–161. <https://doi.org/10.1177/0263276414548490>
- Arnold, P., & Quintas, N. (2020). *Global study: Community-led housing in the COVID-19 context*. UrbaMonde. <https://www.urbamonde.org/IMG/pdf/study-collaborative-housing-pandemic-covid-urba-monde.pdf>
- Arnstein, S. (1969). A ladder of citizen participation. *Journal of the American Planning Association*, 35(4), 216–224.
- Attia, M., & Edge, J. (2017). Be(com)ing a reflexive researcher: A developmental approach to research methodology. *Open Review of Educational Research*, 4(1), 33–45. <https://doi.org/10.1080/23265507.2017.1300068>
- Avilla-Royo, R., Jacoby, S., & Bilbao, I. (2021). The building as a home: Housing cooperatives in Barcelona. *Buildings*, 11(4), 137. <https://doi.org/10.3390/BUILDINGS11040137>
- Baldwin, C., Dendle, K., & McKinlay, A. (2019). Initiating senior co-housing: People, place, and long-term security. *Journal of Housing for the Elderly*, 33(4), 358–381. <https://doi.org/10.1080/02763893.2019.1583152>
- Biggeri, M., Ferrannini, A., & Arciprete, C. (2018). Local communities and capability evolution: The core of human development processes. *Journal of Human Development and Capabilities*, 19(2), 126–146. <https://doi.org/10.1080/19452829.2017.1411896>
- Bruun, M. H. (2018). The financialization of Danish cooperatives and the debasement of a collective housing good. *Critique of Anthropology*, 38(2), 140–155. <https://doi.org/10.1177/0308275X18761960>
- Brysch, S. L., & Czischke, D. (2021). Affordability through design: The role of building costs in collaborative housing. *Housing Studies*, 37(10), 1800–1820. <https://doi.org/10.1080/02673037.2021.2009778>
- Cabré, E., & Andrés, A. (2018). La Borda: A case study on the implementation of cooperative housing in Catalonia. *International Journal of Housing Policy*, 18(3), 412–432. <https://doi.org/10.1080/19491247.2017.1331591>

- Can 70, López, D., & Farré, L. (2019). *Cures en la convivència de persones grans* (6th handbook). Sostre Cívic. https://sostrecivic.coop/wp-content/uploads/2020/02/Guia_6-s%C3%A8nior_WEB.pdf
- Casanova, R. (2023). *Xarxa comunitària de cures*. Col·lectiu Punt6 https://www.punt6.org/wp-content/uploads/2023/11/libret-jornada-15J_tot.pdf
- Chatterton, P. (2013). Towards an agenda for post-carbon cities: Lessons from Lilac, the UK's first ecological, affordable cohousing community. *International Journal of Urban and Regional Research*, 37(5), 1654–1674. <https://doi.org/10.1111/1468-2427.12009>
- Clapham, D., Foye, C., & Blyth, R. (2019). *How should we evaluate housing outcomes?* UK Collaborative Centre for Housing Evidence. <https://www.thinkhouse.org.uk/site/assets/files/1474/cache0419.pdf>
- Clark, D. A., Biggeri, M., & Frediani, A. A. (Eds.). (2019). *The capability approach, empowerment and participation: Concepts, methods and applications*. Springer.
- Coates, D., Anand, P., & Norris, M. (2015). *A capabilities approach to housing and quality of life: The evidence from Germany* (Open Discussion Papers in Economics No. 78). The Open University. <https://oro.open.ac.uk/89766/1/working-paper-78.pdf>
- Comas d'Argemir, D. (2017). Cuidados, género y ciudad en la gestión de la vida cotidiana. In *La erosión del espacio público en la ciudad neoliberal* (pp. 59–90). UNAM.
- Czischke, D., Carriou, C., & Lang, R. (2020). Collaborative housing in Europe: Conceptualizing the field. *Housing, Theory and Society*, 37(1), 1–9. <https://doi.org/10.1080/14036096.2020.1703611>
- Devlin, P., Douglas, R., & Reynolds, T. (2015). Collaborative design of older women's co-housing. *Working with Older People*, 19(4), 188–194. <https://doi.org/10.1108/WWOP-08-2015-0018>
- Droste, C. (2015). German co-housing: An opportunity for municipalities to foster socially inclusive urban development? *Urban Research and Practice*, 8(1), 79–92. <https://doi.org/10.1080/17535069.2015.1011428>
- Durrett, C. (2009). *The senior cohousing handbook: a community approach to independent living*. New Society Publishers. <https://archive.org/details/seniorcohousingh0000durr>
- Ehlenz, M. M. (2018). Making home more affordable: Community land trusts adopting cooperative ownership models to expand affordable housing. *Journal of Community Practice*, 26(3), 283–307. <https://doi.org/10.1080/10705422.2018.1477082>
- Etzezarreta, A., Merino, S., Cano, G., Dol, K., & Hoekstra, J. (2019). The emergence of housing cooperatives in Spain. In G. van Bortel, V. Gruis, J. Nieuwenhuijzen, & B. Pluijmers (Eds.), *Affordable housing governance and finance: innovations, partnerships and comparative perspectives* (pp. 25–40).
- Fernández, A., & Miró, I. (2016). *L'economia social i solidària a Barcelona*. La Ciutat Invisible. Comissionat d'Economia Cooperativa, Social i Solidària - Ajuntament de Barcelona. <https://ajuntament.barcelona.cat/economia-social-solidaria/sites/default/files/2021-12/ESS%20a%20Barcelona.pdf>
- Fernández Arrigoitia, M., Ferreri, M., Hudson, J., Scanlon, K., & West, K. (2023). Toward a feminist housing commons? Conceptualising care - (as) - work in collaborative housing. *Housing, Theory and Society*, 40(5), 660–678. <https://doi.org/10.1080/14036096.2023.2247414>
- Fernández Arrigoitia, M., West, K., & Peace, S. (2018). Towards critical intersections of ageing, housing and well-being. *Home Cultures*, 15(3), 209–221. <https://doi.org/10.1080/17406315.2019.1690274>
- Freixas, A. (2021). *Yo, vieja*. Capitán Swing.
- Ferreri, M., & Vidal, L. (2021). Public-cooperative policy mechanisms for housing commons. *International Journal of Housing Policy*, 22(2), 149–173. <https://doi.org/10.1080/19491247.2021.1877888>
- Fraser, N. (2016). Contradictions of capital and care. *New Left Review*, 100(99), 117.
- Frediani, A. A. (2015). *Participatory capabilities in development practice* (DPU Working Paper No. 178). The Bartlett Development Planning Unit, University College London.
- Frediani, A. A. (2021). Cities for Human Development. *Practical Action Publishing*. <https://doi.org/10.3362/9781788531504>
- Fromm, D. (1991). *Collaborative communities: Cohousing, central living, and other new forms of housing with shared facilities*. Van Nostrand Reinhold.
- Fromm, D. (2012). Seeding community: Collaborative housing as a strategy for social and neighbourhood repair. *Built Environment*, 38(3), 364–394. <https://doi.org/10.2148/BENV.38.3.364>
- García-Lamarca, M. (2023). Housing and welfare in Catalonia, Spain. In M. Grandier & M. Stephens (Eds.), *The Routledge handbook of housing and welfare*. Routledge.
- Girbés-Peco, S., Foraster, M. J., Mara, L. C., & Morlà-Folch, T. (2020). The role of the democratic organization in the La Borda housing cooperative in Spain. *Habitat International*. <https://doi.org/10.1016/J.HABITATINT.2020.102208>
- Glass, A. P. (2013). Lessons learned from a new elder cohousing community. *Journal of Housing for the Elderly*, 27(4), 348–368. <https://doi.org/10.1080/02763893.2013.813426>

- Glass, A. P. (2019). Sense of community, loneliness, and satisfaction in five elder cohousing neighborhoods. *Journal of Women & Aging*, 32(1), 3–27. <https://doi.org/10.1080/08952841.2019.1681888>
- Groat, L., & Wang, D. (2013). *Architectural research methods*. Wiley.
- Haffner, M., & Elsinga, M. (2019). Housing deprivation unravelled: Application of the capability approach. *European Journal of Homelessness*, 13(1), 13–28.
- Hayden, D. (1986). *Redesigning the American dream: The future of housing, work and family life*. Norton Professional Books.
- Hudson, J., Scanlon, K., Udagawa, C., Arrigoitia, M. F., Ferreri, M., & West, K. (2021). ‘A slow build-up of a history of kindness’: Exploring the potential of community-led housing in alleviating loneliness. *Sustainability*, 13(20), 11323. <https://doi.org/10.3390/SU132011323>
- Ibrahim, S. S. (2006). From individual to collective capabilities: The capability approach as a conceptual framework for self-help. *Journal of Human Development*, 7(3), 397–416. <https://doi.org/10.1080/14649880600815982>
- Jarvis, H. (2011). Saving space, sharing time: Integrated infrastructures of daily life in cohousing. *Environment and Planning A*, 43(3), 560–577. <https://doi.org/10.1068/a43296>
- Jarvis, H. (2015). Community-led housing and “slow” opposition to corporate development: Citizen participation as common ground? *Geography Compass*, 9(4), 202–213. <https://doi.org/10.1111/gec3.12206>
- Jarvis, H. (2019). Sharing, togetherness and intentional degrowth. *Progress in Human Geography*, 43(2), 256–275. <https://doi.org/10.1177/0309132517746519>
- Jupp, E., Bowlby, S., Franklin, J., & Hall, S. M. (2019). *The new politics of home: Housing, gender and care in times of crisis* (1st ed.). Bristol University Press. <https://doi.org/10.2307/j.ctvjghvp4>
- Keller Garganté, C., & Ezquerro Samper, S. (2021). Viviendas colaborativas de personas mayores: Democratizar el cuidado en la vejez. *REVESCO Revista De Estudios Cooperativos*. <https://doi.org/10.5209/R EVE.71867>
- Khatibi, M. (2022a). A socio-spatial approach to the first legal hall dwelling setting in Switzerland: The case study of Hallenwohnen in Zurich. *Journal of Housing and the Built Environment*, 38(2), 979–998. <https://doi.org/10.1007/s10901-022-09980-y>
- Khatibi, M. (2022b). Socio-spatial interactions of a cluster-house concept apartment in Mehr als Wohnen project in Zurich, Switzerland. *Frontiers of Architectural Research*, 11(2), 191–202. <https://doi.org/10.1016/j.foar.2021.10.002>
- Kimhur, B. (2020). How to apply the capability approach to housing policy? Concepts, theories and challenges. *Housing, Theory and Society*, 37(3), 257–277. <https://doi.org/10.1080/14036096.2019.1706630>
- Labit, A. (2015). Self-managed co-housing in the context of an ageing population in Europe. *Urban Research & Practice*, 8(1), 32–45. <https://doi.org/10.1080/17535069.2015.1011425>
- Lacol, La Ciutat Invisible, & La Dinamo Fundación. (2018). *Habitar en comunidad: la vivienda cooperativa en cesión de uso*. Catarata.
- Lang, R., Carriou, C., & Czischke, D. (2018). Collaborative housing research (1990–2017): A systematic review and thematic analysis of the field. *Housing, Theory and Society*, 37(1), 10–39. <https://doi.org/10.1080/14036096.2018.1536077>
- Lang, R., Chatterton, P., & Mullins, D. (2020). Grassroots innovations in community-led housing in England: The role and evolution of intermediaries. *International Journal of Urban Sustainable Development*, 12(1), 52–72. <https://doi.org/10.1080/19463138.2019.1663525>
- Lefebvre, H. (1991). *The production of space*. Blackwell.
- Leßmann, O. (2022). Collectivity and the capability approach: Survey and discussion. *Review of Social Economy*, 80(4), 461–490. <https://doi.org/10.1080/00346764.2020.1774636>
- Leyva del Río, S. (2022). Conceptualising the commons as a relational triad: Lessons from the grant of use cooperative housing model in Barcelona. *Geoforum*, 136, 112–121. <https://doi.org/10.1016/j.geoforum.2022.09.007>
- López, D., & Estrada, M. (2016). ¿Cómo avanzan las dinámicas de senior cohousing en España? *Edades En Transición. Envejecer En El Siglo XXI*, 21, 227–237.
- Martínez-Vargas, C., Walker, M., Melis Cin, F., & Boni, A. (2022). A capabilitarian participatory paradigm: Methods, methodologies and cosmological issues and possibilities. *Journal of Human Development and Capabilities*, 23(1), 8–29. <https://doi.org/10.1080/19452829.2021.2013173>
- Mogollón García, I., & Fernández Cubero, A. (2016). *Arquitecturas del cuidado*. Emakunde.
- Nussbaum, M. (2011). *Creating capabilities: The human development approach*. Harvard University Press.
- Pareja-Eastaway, M., & Sánchez-Martínez, T. (2017). More social housing? A critical analysis of social housing provision in Spain. *Critical Housing Analysis*, 4(1), 124–131. <https://doi.org/10.13060/23362839.2017.4.1.331>

- Parera, Mireia. (2023). *Teixir comunitats: invitació per pensar la vida en comú*. Pollen Edicions.
- Power, E. R., & Mee, K. J. (2019). Housing: An infrastructure of care. *Housing Studies*, 35(3), 484–505. <https://doi.org/10.1080/02673037.2019.1612038>
- Prytula, M., Rexroth, S., Lutz, M., & May, F. (2020). *Cluster-Wohnungen für Baulich und Sozial Anpassungs-fähige Wohnkonzepte einer Resilienten Stadtentwicklung*. Fraunhofer IRB Verlag. <https://www.fh-potsdam.de/forschung-transfer/projekte/cluster-wohnen>
- Puplampu, V., Matthews, E., Puplampu, G., Gross, M., Pathak, S., & Peters, S. (2020). The impact of cohousing on older adults' quality of life. *Canadian Journal on Aging*, 39(3), 406–420. <https://doi.org/10.1017/S0714980819000448>
- Rapoport, A. (1995). A critical look at the concept home. In *The home: Words, interpretations, meanings and environments*. (pp. 25–52).
- Reyes, A., Novoa, A. M., Borrell, C., Carrere, J., Pérez, K., Gamboa, C., Daví, L., & Fernández, A. (2022). Living together for a better life: The impact of cooperative housing on health and quality of life. *Buildings*. <https://doi.org/10.3390/buildings12122099>
- Robeyns, I. (2005). The capability approach: A theoretical survey. *Journal of Human Development*, 6(1), 93–117. <https://doi.org/10.1080/146498805200034266>
- Rojo-Perez, F., Rodriguez-Rodriguez, V., Molina-Martinez, M. A., Fernandez-Mayoralas, G., Sanchez-Gonzalez, D., Rojo-Abuin, J. M., Ayala, A., Rodriguez-Blazquez, C., Calderon-Larrañaga, A., Ribeiro, O., & Forjaz, M. J. (2022). Active ageing profiles among older adults in Spain: A multivariate analysis based on SHARE study. *PLoS ONE*, 17(8), Article e0272549. <https://doi.org/10.1371/journal.pone.0272549>
- Scanlon, K., Hudson, J., Fernández Arrigoitia, M., Ferreri, M., West, K., & Udagawa, C. (2021). *Community-led housing and loneliness: Research into the impact of community-led housing and co-housing solutions*. The London School of Economics and Political Science. https://assets.publishing.service.gov.uk/media/619b67c98fa8f503764ed391/Loneliness_research_-_Those_little_connections_.pdf
- Scanlon, K., & Fernández Arrigoitia, M. (2015). Development of new cohousing: Lessons from a London scheme for the over-50s. *Urban Research and Practice*, 8(1), 106–121. <https://doi.org/10.1080/17535069.2015.1011430>
- Scheller, D., & Larsen, H. G. (2019). Urban activism and co-housing. In H. Thörn, H. G. Larsen, P. Hagbert, & C. Wasshede (Eds.), *Contemporary co-housing in Europe: Towards sustainable cities?* (pp. 120–139). Taylor and Francis Inc. <https://doi.org/10.4324/9780429450174-7>
- Schmid, S. (2019). *A history of collective living forms of shared housing*. Birkhäuser.
- Sen, A. (1999). *Development as freedom*. Oxford University Press.
- Star, S. L. (1999). The ethnography of infrastructure. *American Behavioral Scientist*, 43(3), 377–391. <https://doi.org/10.1177/00027649921955326>
- Tavory, I., & Timmermans, S. (2014). *Abductive analysis: Theorizing qualitative research*. University of Chicago Press.
- Thörn, H., Larsen, H. G., Hagbert, P., & Wasshede, C. (2020). Co-housing, sustainable urban development and governance: An introduction. In H. Thörn, H. G. Larsen, P. Hagbert, & C. Wasshede (Eds.), *Contemporary co-housing in Europe: Towards sustainable cities?* (pp. 1–20). Routledge.
- Tummers, L. C. (2017). *Learning from co-housing initiatives — Between Passivhaus engineers and active inhabitants* (Doctoral dissertation, Delft University of Technology). <https://doi.org/10.7480/abe.2017.14.1858>
- Tummers, L. (2016). The re-emergence of self-managed co-housing in Europe: A critical review of co-housing research. *Urban Studies*, 53(10), 2023–2040. <https://doi.org/10.1177/0042098015586696>
- Turner, J. F. C. (1972). Housing as a Verb. In J. F. C. Turner & R. Fichter (Eds.), *Freedom to build: Dweller control of the housing process* (pp. 148–175). Macmillan.
- Tzika, Z., Sentieri-Omarementeria, C., & Martínez-Duran, A. (2023). Towards collective forms of dwelling: The grant-of-use housing cooperatives in Catalonia. *Revista De Arquitectura*, 28(45), 54–75. <https://doi.org/10.5354/0719-5427.2023.70003>
- Vestbro, D. U. (2010, May). Living together-cohousing ideas and realities around the world. In *Proceedings from the international collaborative housing conference in Stockholm*.
- Vidal, L. (2018). The politics of creditor–debtor relations and mortgage payment strikes: The case of the Uruguayan Federation of Mutual-Aid Housing Cooperatives. *Environment and Planning a: Economy and Space*, 50(6), 1189–1208. <https://doi.org/10.1177/0308518X18775107>
- Viskovic Rojs, D., Hawlina, M., Gračner, B., & Ramšak, R. (2020). Review of the participatory and community-based approach in the housing cooperative sector. In J. Nared & D. Bole (Eds.), *Participatory Research and Planning in Practice*. The Urban Book Series. https://doi.org/10.1007/978-3-030-28014-7_6
- Urrutia Beaskoa, A. (2018). *Cuidar: una revolución en el cuidado de las personas*. Ariel.

- Weeks, L. E., Bigonnesse, C., McInnis-Perry, G., & Dupuis-Blanchard, S. (2020). Barriers faced in the establishment of cohousing communities for older adults in eastern Canada. *Journal of Aging and Environment*, 34(1), 70–85. <https://doi.org/10.1080/02763893.2019.1627267>
- Williams, J. (2005). Designing neighbourhoods for social interaction: The case of cohousing. *Journal of Urban Design*, 10(2), 195–227. <https://doi.org/10.1080/13574800500086998>
- Yin, R. K. (2018). *Case study research and applications. Design and methods* (6th edn.). SAGE.
- Zimmerman, M. A. (2000). Empowerment theory: Psychological, organizational and community levels of analysis. *Handbook of community psychology* (pp. 43–63). Springer.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.