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Towards empowering cohousing communities: Finding balance with a group of users-clients throughout the architectural process

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Abstract: This paper explores the evolving role of architects in cohousing projects in response to environmental, economic, and social challenges. This research incorporates insights from semi-structured interviews in three Belgian case studies. The foundations and values of cohousing communities are tackled, highlighting shifts in architects' roles and challenges in working with groups of user-clients. In these cohousing processes, we found that the representatives of these user-client groups may not always share the full breadth of their negotiations with architects. Architects seem to miss out on some of the nuances, and some participants found that this approach left their voices unheard. Amidst pragmatic concerns and other value-based issues, this paper reimagines some aspects of the architects' role in cohousing projects. This paper aims to help architects balance stakeholders' viewpoints within budget, timeline, practicality, and values constraints.

Keywords: Cohousing communities, architectural design processes, user-centered approaches, self-developed housing projects, architects' role

1. Introduction

1.1 Context

Innovative housing models, particularly collective housing, have gained traction as a response to contemporary challenges encompassing environmental, economic, and social aspects (Carriou & D'Orazio, 2015; Lietaert, 2010; Tummers, 2016).

Collective housing, or cohousing, refers to housing arrangements where individuals or families come together to form a community and share resources, facilities, and decision-making processes (Tummers, 2015). These forms of housing emphasize cooperation, shared responsibilities, and a sense of belonging. This shift towards collective housing is fueled by a desire



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to foster stronger social ties, create more inclusive and sustainable living environments, and promote resource efficiency (Bacqué & Biau, 2010; Arrigoitia & Scanlon, 2017).

Several definitions seek to encapsulate the essence of collective housing, emphasizing the delicate equilibrium between private and shared spaces, promoting voluntary engagement and communal living (Giaux, 2006; Tummers, 2016). In this study, the term "cohousing" is selected as the preferred terminology, reflecting shared values and an ecological, solidarity-based vision (Bacqué & Carriou, 2012).

These initiatives, led by user-based collective project management, deviate from conventional housing production models. They challenge established frameworks by placing multiple co-residents at the core of the decision-making process. Such self-promotion presents a significant opportunity for residents' involvement in designing their living spaces, but carries a high risk of non-completion (Menez, 2014). The design process for such projects can be particularly lengthy and complex for residents, who also contend with the challenges of a legal and regulatory framework ill-suited to collective housing, especially in Belgium (ASBL Habitat et Participation, 2017). The majority of these initiatives face failure, confronting technical, economic, and human challenges (Marandola & Lefebvre, 2009).

Cohousing initiatives, by engaging co-residents in architectural design, also challenge the traditional role of architects as sole creators (Prost & Chaslin, 2014). This collaborative approach calls for users co-designing the project to align it with their needs, thus enriching architectural solutions (Sanders and Stappers, 2008). As a result, these approaches deviate from the conventional top-down approach to design and construction.

Architects closely collaborate with residents throughout the entire design and building process, allowing for greater customization and a more responsive design that reflects the needs and desires of the community (Biau & D'Orazio, 2013). This approach empowers residents to actively shape their environment and fosters a sense of ownership and pride in the final product.

1.2 Focus

This paper investigates three resident-initiated cohousing initiatives in French-speaking Belgium. These initiatives, characterized by user-based collective ownership, challenge conventional housing production models by prioritizing residents' active involvement in decision-making processes.

Our initial research question examines the challenges encountered when architects engage with a diverse group of user-clients throughout such architectural processes. The second research question explores the role of architects in this specific context, drawing upon codesign design principles. We explore how architects could adopt a facilitator role, guiding the collaborative process and integrating broader user-feedback into the design.

2. Literature review

2.1 Cohousing

Collective housing traces its roots to utopian philosophies, sociology, and architecture, gaining prominence in Scandinavia in the 1970s and experiencing a resurgence in the 2000s (Carrion & D'Orazio, 2015; Lietaert, 2010; Tummers, 2016). Quantitative data on Belgian collective housing is limited, but due to recent growth, we face an estimate of over 300 projects in Wallonia and Brussels (Dethier, 2019).

While cohousing initially emerged as an answer to housing crises by offering affordable alternatives, its purposes have evolved. Beyond economic considerations, the movement is driven by social and ecological principles, originating in socio-political and environmental movements, which shape its ideology and objectives (Maury, 2009; Debuigne, 2005; Dénéfle, 2015).

In the context of cohousing projects led by residents, effective organization and decision-making processes are essential. Self-governance behaviors within resident groups highlight the significance of collective intelligence tools. This section briefly presents these tools and the strategy shared by the three cases studied: sociocracy.

Self-governance models usually strive for horizontal management structures, collective decision-making processes, and an equal voice for each member to promote autonomy, individual commitment, and responsibility within the organization (Buck & Endenburg, 2004).

Sociocracy, a governance model emphasizing self-organization, parallels the functioning of a living organism, as all parts of the organization wield authority over the whole. Sociocracy revolves around collaborative dynamics and interpersonal relationships, promoting effective decision-making and conflict management (Buck & Endenburg, 2004). For the successful implementation of sociocracy, shared humanistic values such as respect, tolerance, active listening, kindness, and empathy are crucial (Delstanche, 2014).

Governance models like sociocracy, supported by principles of collective intelligence and nonviolent communication, offer valuable tools for finding equilibrium in cohousing communities characterized by cooperative decision-making and conflict resolution.

The success of resident-led projects often hinges on the ability to address and manage human-related factors within the group itself, including relationships, member divergences, disagreements, and varying perspectives (Marandola & Lefebvre, 2009). Many of these conflicts can be preemptively resolved through the establishment of a robust governance system (Eeman, 2009; Dethier, 2019), providing coherence and an internal mode of operation. Participatory and equitable distribution of decision-making power is essential for avoiding structural conflicts (Diana-Leafe, 2015).

2.2 Values and their role in cohousing design

Values play a pivotal role in shaping the cohousing movement. These projects are often initiated by individuals and groups united by shared values, such as solidarity, cooperation, and ecological responsibility (Marandola & Lefebvre, 2009). These housing communities are built on the belief that these shared values can be manifested in their living arrangements and daily interactions.

D'Orazio (2012) identifies two distinct ideological tendencies within the participatory housing movement: Cooperatives of Inhabitants; and Self-Promotion. This second approach is characterized by the desire of resident groups to have complete control over their real estate projects, seeking to break the asymmetry between resident-users and professional decision-makers while promoting forms of co-production (D'Orazio, 2012). These two major networks do not cover the entire spectrum of the movement: some projects adopt hybrid postures.

Collective projects bringing together individuals who share values still lead to occasional paradoxes between idealism based on values, and the pragmatism inherent to certain stages of the design process. The interplay of values (designed to unify and bind the group), decision-making, and negotiation creates a dynamic exchange that influences the design process at various levels and shapes the design outcomes (Le Bail, 2018; Détienne et al., 2019). Several authors have explored the impact of human values on design (see: Friedman & Kahn, 2003; Boztepe, 2007; Van der Valden & Mörtberg, 2014). Détienne et al. (2019) address the role of values in decision-making and design within cohousing projects. Values function as principles of participation, criteria for design decisions, and objects of negotiation in such collaborative processes (Détienne et al., 2019).

According to Le Bail (2018), the role of shared values within cohousing communities falls into two dimensions: (i) the sociotechnical dimension concerning the design object, encompassing technical and organizational solutions; and (ii) the psychosocial or ideological dimension, relating to individual and collective ideas and values. These dimensions play a crucial role in linking the residents' ideologies, collaboration methodology, and the design object. Le Bail (2018) emphasizes that the shared system of values can evolve, leading to changes in the sociotechnical system itself due to conflicts related to these values. She identifies two types of conflicts leading to such evolutions: conflicts between rational and ideological interests and conflicts between different values claimed by the group or between an individual and the group. Le Bail (2018) outlines four conditions for the effective functioning of a resident group: shared common values; active involvement of members of the community; guiding rules (often expressed in a charter); and social interactions for maintaining common ideas and values, as well as reshaping rules and procedures. These conditions highlight that efficient group functioning is not automatic but requires constant (re)structuring and (re)organization.

2.3 Shifts in architects' roles

Architects and their roles in cohousing projects have evolved significantly over the years. During the 1970s, architects used to be perceived as pivotal figures, often described as "militant" architects or activist architects. This role primarily emerged in Scandinavian countries and later in Belgium, as a response to the need for better housing quality and opposition to mass production and standardization (Lietaert, 2010). During this era, architects actively engaged in creating the Movement of Self-Managed Housing Groups (French acronym: MHGA), collaborating closely with residents who shared their ideals. These "militant" architects, whose involvement was guided by shared values, strong sense of ideology and social commitment, would assume multiple roles: "architect/inhabitant", who initiated or joined forming groups; "prospector" architect, responsible for identifying potential land for housing projects, and "advisor-architect", sought after for their commitment to self-managed housing groups (Biau & D'Orazio, 2013, translated).

The 1990s marked a period of reduced enthusiasm and engagement, leading to a shift in the architect's role within cohousing projects. The demand for cohousing experienced a resurgence in the early 2000s, with residents driven by the common goal of taking control of their living environment and creating sustainable communities. Architects found themselves in a different role characterized by greater pragmatism, and didn't necessarily show as much ideological, social, and political alignment with the residents' values as before (Biau & D'Orazio, 2013). Instead, architects were primarily seen as technical providers, engaged in a more pragmatic, technical, and environmental capacity, focusing on delivering projects efficiently and cost-effectively (Lacoin, 2018). While still potentially sensitive to the values intrinsic to the cohousing movement, the evolution of architects' roles in cohousing projects highlights the need for architects to adapt to changing circumstances and demands from user-client groups while being outsiders.

Building successful relationships nowadays involves a complex balance between trust, autonomy, and architects' engagement, as well as user involvement (Defays and Elsen, 2018). In the context of citizen participation, Schelings *et al.* (2020, p.22) advocate for new roles and responsibilities for designers: "Participatory processes thus create opportunities for mutual learning and designers are expected to educate and empower participants". These authors highlight architects' multifaceted roles and skills in participatory design processes, emphasizing their responsibility to engage and empower participants throughout the design process. In these settings, architects are depicted not only as technical experts but also as facilitators who must balance control and flexibility, ensure transparency and ethical conduct, and foster participants' motivation and involvement. Their skills extend beyond architectural design to include recruitment, communication, and the management of participatory processes, aiming to make meaningful impacts relying on the contributions of all stakeholders.

Extending this reflection to cohousing design contexts, we could hypothesize that designing for a group of client-users can bring up similar challenges to those identified in participatory

design settings. Engaging user-client groups involves recognizing and valuing their contributions, fostering motivation and autonomy, and leveraging the diverse expertise they bring to the design process. As Schelings et al. (2020) highlight, mutual learning and empowerment are crucial, suggesting that architects in cohousing projects need to navigate between technical and facilitation proficiency to ensure project success.

Although relatively unrecognized in the construction field, the emergence of “project facilitators” (among other titles) in the context of self-promoted cohousing projects is in significant development. These complex projects involve future residents collaborating with a range of external stakeholders, including local representatives, architects, businesses, and financial support organizations. The coordination challenges, especially concerning time, can become substantial (Dethier, 2019). Such specific roles have thus arisen to streamline complex processes and enhance the likelihood of project success (Devaux, 2013; Dethier, 2019).

As a consequence, a distinction between architects and such facilitators has emerged over time. Bacqué & Biau (2010) describe the latter as “relay actors” bridging the gap between resident collectives and decision-making professionals. Cohousing facilitators are now described as “external third parties” situated at the interface between residents, activists, and professionals (Devaux, 2013, p. 224). Sometimes trained architects, they can take on various roles, including that of a project management assistant, with a growing emphasis on social dimensions necessitating approaches tailored to each project’s needs (Devaux, 2013; D’Orazio, 2017).

3. Methodology

This research incorporates insights from semi-structured interviews in three Belgian case studies. It focuses on self-promoted cohousing cases, selected for homogeneity in group size, the degree of involvement of residents, and the availability of information. The selected cases provided insights into coordination, organization, and interactions between architects and user-clients during the early stages of the design process. Prior to the interviews, various online resources, including project websites, testimonies, and written materials, were explored to gain comprehensive insights into each project.

Table 1: Summary of the three selected case studies and the interviewees

Case Study	Interviewed User-clients (n=7)	Interviewed Architects (n=3)	Dates (Project Start - First Development)	Location	Number of Housing Units
1	Claire, Caroline, Martin, Simon	Laurent	2010 - 2016	Brussels	18
2	Andrès, Georges	Jules	2013 - 2021	Wallonia	14
3	Florence	Laura	2017 - discontinued	Wallonia	12

Interviews were conducted with residents, architects, and project managers, enabling diverse perspectives (table 1). Each interview session was conducted on-site to facilitate context-rich discussions and observations. Pseudonyms are used to ensure anonymity and confidentiality.

The research deployed a thematic analysis method on the transcripts of participants' interviews, to comprehensively explore thematic patterns during collaborative architectural processes within self-promoted cohousing projects. Thematic content analysis, as advocated by Clarke and Braun (2013), is chosen due to its adaptability to various qualitative datasets and research subjects. This method, being both inductive and deductive, enables researchers to identify, structure, and interpret themes emerging from qualitative data (Ciesielska & Jemielniak, 2018). Perrault's (1987) method serves as a model for transcription, aiming at maintaining content fidelity while omitting hesitations, language errors, repetitions, or hesitations. This step facilitated familiarity with the data and developed an initial understanding of the content.

The subsequent phase involved data coding, line by line, using an analysis grid (Andreani & Conchon, 2005). The chosen passages were selected through active reading and matched with pre-established thematic categories, maintaining an open-ended deductive approach to ensure a comprehensive representation (Bernard & Ryan, 2003).

4. Findings

The thematic analysis results in the exploration of key themes related to: challenges faced in finding balance within an evolving group; architects' role and challenges faced in working with user-client groups, and tools and strategies to inform architectural practices.

4.1 Challenges faced by evolving groups

Forming cohesive and evolving cohousing communities presents several challenges, as observed in the three distinct projects. In the initial stages, founding members like Pierre and Georges (see Table 2 below), driven by passion and shared convictions, embark on the journey to create cohousing communities. However, the process of recruitment and retention of members can be difficult.

One of the key challenges lies in the selection of members. Florence's experience highlights the difficulties in recruiting individuals who share a common vision, leading to potential issues with the selection process. Furthermore, the composition of these groups tends to evolve. While some groups, such as Project 1 and Project 2, manage to navigate this evolution smoothly, Project 3 struggles to attract and retain new members due to the uncertainty inherent to the project's early stages.

Reasons for people leaving cohousing communities vary (Table 2). Financial commitment, ideological differences, and reconsideration of prior decisions are some of the factors leading to departures. Notably, the values of the group and the practical realities can sometimes clash, highlighting the challenge of balancing ideals with practicality. In the case of Project 3,

the departure of individuals who were perceived as unstable or incompatible with the group's goals is indicative of a selective process conducted by the core members.

Table 2 *Involvement and departures of group members occurring during each project, as mentioned during the interviews.*

Project	Verbatim	Cause(s)
1	"There were people who were interested but at a certain point were not yet ready to take out a loan, or at the moment when we found this piece of land, they thought, 'No, this doesn't suit me, actually.' " (Caroline, user-client)	Financial commitment; Plot selection
1	"It was a debate because I remember there was someone who had to, who had to leave the project. Because this person really wanted to adopt the Foundation model where there was a common structure that owned everything, actually." (Caroline, user-client) "There was one person who was really pushing [...] for more equity. But what's funny is that because he wanted that, we reexamined the question, but he still left. I think he took a lot of... [...] heat for it." (Claire, user-client)	Choice of a legal structure incompatible with one's values
1	"There was a clash at one point, and a lot of people left. It's because we had initially decided to go with a traditional joint ownership model. Then, I don't know, about 6 months later, we revisited the question. Some people in the group said, 'Oh, but a group that reopens a discussion that had been closed?' Well, they didn't feel comfortable with it, so a lot of people left the group." (Claire, user-client)	Reopening of a closed discussion/Irreconcilable disagreement
2	"A person who withdrew and didn't stay, due to a disagreement on how to conceive and work. Well, he didn't resonate with the group's way of doing things, so he preferred to leave, you know." (Georges, user-client) "He wasn't cut out to live in a communal housing setting. He wanted responsibilities that were completely incompatible with the opportunities he had, and it was clear to everyone that he was mistaken. You don't come to a communal housing for saying 'I want to do this, and I want these responsibilities,' no. He was mistaken." (Andrès, user-client)	Project vision incompatible with the group's vision; Divergent values between the individual and the group; Approach to work and group management incompatible with the governance established in the group
3	"You attract a lot of people who are feeling unwell in their own skin, who are in the process of deciding to change their lives and all, but as a result, they are very unstable, and so gradually we managed to get them out in 2/3 meetings that even discouraged them." (Florence, user-client)	Financial and emotional instability; Required level of involvement

Furthermore, inequalities in involvement pose a significant hurdle, with a select few members bearing the bulk of the work and financial burden. This can lead to internal dissension and strain the group's cohesion. Inequalities in participation can also result in the exclusion of certain members, as observed in Project 3, where the core members sought to discourage

those deemed undesirable. These disparities in commitment and involvement within the group can weaken its overall stability and resilience.

Shaping common values within cohousing communities is also a pivotal aspect of these projects, and residents are motivated to join based on strong values, which can be broadly categorized into human and environmental values. These motivations, as documented in Table 3, are critical for establishing a shared vision and goals. Each cohousing project possesses a unique identity, and residents must communicate and articulate their aspirations explicitly. This is often achieved through the formulation of a charter, which plays a fundamental role in these communities. The charter, as exemplified in Project 1, encapsulates the project's shared values, offering a clear foundation for the group; outlines the rights and obligations of co-owners; provides a framework for resolving conflicts, and serves as a presentation tool for potential candidates during group expansion.

Table 3 Example of quotes documenting motivations to join around core community shared values

User-clients	Verbatim	Value expressed
(Florence, Project 3)	"I really believe that it's the future [...] in terms of ecology, that's clear. And it rebuilds solidarity among people. It compels people to communicate across generations."	Environmental; Human: Solidarity, intergenerational interactions
(Caroline, Project 1)	"Well, I really liked the concept, both from an environmental perspective and in terms of solidarity, the services we can provide to our neighbors."	Environmental; Human: Solidarity
(Martin, Project 1)	"I loved the group, and I thought to myself: there's actually a project here of living together in a real sense of the term, meaning people who share things, not necessarily a religious community, a sect, or anything like that, but a group with values, a charter."	Human: Community, sharing
(Andrès, Project 2)	"Because at my age, at least, entering this new family, because that's what it is, is extraordinary. [...] What I knew is that there would be great closeness among the members, and that appealed to me."	Human: Solidarity, sharing

The process of formalizing the project's values and goals can be demanding, requiring residents to confront their viewpoints and engage in extensive discussions and debates. Residents may have varying interpretations of these values, leading to challenges in translating them into concrete actions. Additionally, there is the issue of timing – whether values should be implemented immediately or over time (Project 2). The choice of a legal structure also plays a significant role in concretizing common values. By selecting a specific legal model, residents demonstrate their commitment to shared values and principles, such as coopera-

tion and equity. Yet, this decision can lead to conflicts between pragmatic and ideological interests, as seen in Project 1, where disagreements regarding the legal structure ultimately resulted in a member's departure (see Table 2).

Recognizing these challenges in group coordination, organization, and interactions is valuable for architects dealing with cohousing communities. These insights underscore the need for designers to address the balance between pragmatic and ideological values thoughtfully. The complex interplay between values, charters, and legal structures is essential in shaping and preserving the collective identity of cohousing communities.

4.2 Challenges facing a cohousing community

These three cases show architects having varying levels of involvement at different stages of the projects. For instance, in Project 3, residents had already meticulously defined their program, vision, needs, and desires before the architect's involvement. This information was documented and shared with potential architects, forming a strong foundation for collaboration. One key selection criterion was that the architects fully align with this document, hoping to foster mutual understanding. While the project itself encountered various obstacles, the specific relationship with the architect, as described by Florence (user-client), suggests a successful collaboration based on mutual understanding, respect, and adaptability to the project's needs and constraints. However, the broader project faced significant challenges unrelated to the architect, including financial constraints, internal disagreements, and the inherent complexities of managing a cooperative housing project. These challenges seemed to stem more from the group dynamics and financial planning. These challenges are presented by the participants (Laura & Florence) as external factors, rather than related to the relationship with the architect.

In contrast, Project 2 faced a significant issue with its initial architect, resulting in collaboration termination due to financial differences. Despite the architect's initial alignment with residents' desires, budget-related conflicts arose during the project's realization phase. In such cases, pragmatic architects who can adapt and communicate effectively, like Jules (architect) in Project 2, become crucial for project continuity.

Architects can benefit from a structured approach to communication with user-clients. In Project 1, Laurent proposed an intermediary team to facilitate interactions, given his extensive experience and to avoid overwhelming direct contact with the entire group. This structured approach is also favored by other architects who insist that managing interactions with the whole community can be challenging.

The organization of cohousing communities into working groups can play a pivotal role in facilitating the efficient functioning and management of such communities. These working groups also referred to as "circles" or "cells", are observed in the three case studies. They allow community members to divide their responsibilities into specific areas of focus, to enhance decision-making efficiency and task distribution. This division prevents the need for

constant full-group meetings on all subjects, saving considerable time and effort while enhancing productivity. Each working group can operate semi-autonomously, managing its tasks and workload independently.

Yet, some residents felt marginalized from early discussions and decision-making, voicing dissatisfaction over their restricted influence on the outcomes. This indirect mode of communication and the generalized portrayal of residents' preferences through intermediaries raised significant challenges, notably when individual housing desires diverged from the group consensus. Claire (user-client, Project 1) expresses frustration over her inability to join the architecture group due to existing commitments: "I was frustrated because I would have liked to have more influence on how decisions were made... I found it more interesting to involve the whole group", she said. This sentiment was echoed by others who, despite not being part of the architecture circle, showed interest in the architectural process. Martin (user-client, Project 1), being a member of the architecture workgroup, describes the process more as consultation than codesign.

This perception of inequality in participation was nuanced in Project 3, where preliminary architectural considerations were well advanced before consulting with architects, allowing residents like Florence (user-client, Project 3) to feel sufficiently involved in the design phase. Florence also mentioned the autonomy given to circles for minor decisions to streamline discussions, some kind of threshold below which group approval was not needed. Yet, for significant decisions, whole group consensus was mandatory. She noted the extensive commitment required, referencing the numerous lengthy meetings held to deliberate on various issues.

Martin (user-client, Project 1) elaborated on the influence certain circles had on decision-making, admitting to the selective presentation of choices to the broader group, which sometimes left others feeling blindsided by decisions. This was further emphasized by Simon (user-client, Project 1) observing that many decisions seemed to be made without broader discussion, leading to surprises and questions about the rationale behind certain choices.

Jules (Architect, Project 2) highlighted the importance of having skilled individuals within groups to guide technical and organizational matters, mentioning Georges (user-client, Project 2) as an exemplar of such a presence and his critical role in the successful group dynamic. Laura (Architect, Project 3) acknowledges the challenge of working with a generalized understanding of residents' desires, pointing out the difficulty of aligning this with the diverse preferences for individual living spaces.

In Projects 2 and 3, the architects, despite clear initial project documentation, employed individual surveys and interviews to capture the depth of each resident's desires. This approach aimed to identify potential disparities and avoid group influence. Ultimately, the formation of small workgroups within the community, as key contacts, still emerged as a critical element for project success. This structure aimed for effective communication and realization of shared values.

Architects sometimes prioritized communal aspects of the architecture over individual preferences, for instance in Projects 2 and 3. Cohousing residents often agree on a collective vision of community living, relegating individual desires to a secondary role. This practice is underpinned by the belief that architecture should serve the community's needs, rather than catering to individual preferences. However, in Project 1, residents felt that their individual desires were not adequately considered, leading to dissatisfaction. Claire and her husband Simon (Project 1), after making a direct appeal to their architects to slightly adjust the positioning of their windows to better suit their preferences, found their request unmet. The architects cited aesthetic reasons for their refusal to make the proposed alterations: "After all of it, we received a plan and saw (...) what is planned. And then they just told us that we can't have any influence on the size of the windows anymore (...) because it doesn't match their overall architectural projects, that if we had put smaller windows, it wouldn't have been as pretty" (Caroline, user-client, Project 1). Martin (user-client, Project 1) encountered a similar situation, concerning the size and materials of his windows. Active in the architecture workgroup and in direct touch with the architects, it appears he was neither consulted nor given a chance to share his perspective on this matter: "I was somewhat presented with a set decision. Marc wanted aluminum too, but why [did they force] aluminum on us too? I didn't understand" (Martin, user-client, Project 1).

The effectiveness of the "working groups" approach is accompanied by more challenges. As seen in Claire's (user-client, Project 1) account, not all working groups operate with the same intensity at all times. This led to fluctuations in the distribution of workload. This unequal workload distribution, while necessary, may lead to feelings of frustration and unfulfilled participation among certain community members, as they might desire more influence in the decision-making process, especially in areas where they are not directly involved, such as architectural decisions. The presence of working groups in cohousing communities can also inadvertently create power imbalances, even when the intention is to distribute power equitably. In the absence of clear leadership or designated decision-making roles within the working groups, certain individuals may emerge as *de facto* leaders, influencing decisions and outcomes. These "leaders" may inadvertently exercise greater influence over group decisions, contributing to disparities in participation and control over the decision-making process. While the approach can work well in cases where individual preferences align with the goal of homogeneity, as seen in Projects 2 and 3, it may prove less effective in situations where individual housing requests are more diverse, as in Project 1. In such cases, direct interactions and individual meetings with architects may be necessary to ensure that residents' unique preferences are adequately considered.

4.3 Architects' Roles and Facilitators

The role of architects in cohousing communities presents unique challenges, particularly when dealing with multiple user-clients who collectively shape the project. They must navigate the delicate balance between individual preferences and shared values. The success of

these projects often hinges on architects' ability to understand, adapt, and effectively communicate with multiple user-clients while aligning their designs with the core values of the community.

Based on the interview with Laurent (Architect, Project 1), the architect's role in cohousing projects is multifaceted, involving deep engagement with the community and balancing individual desires with collective needs. Laurent's experience showcases the importance of architects being adaptable, facilitating group dynamics, and integrating residents' inputs into the design process. His approach emphasizes communication, participation, and a practical understanding of how to navigate the complexities of group decision-making, all while staying true to the project's architectural and ecological goals.

The emerging figure of a facilitator is becoming increasingly essential within cohousing communities. Stéphane (user-client, Project 1) is often referred to as a "coach" of sorts by interviewees. He exemplifies the pivotal role such facilitators play in the organization and structuring of these groups, and guides optimal group functioning, defining workgroup roles, scheduling meetings, and showcasing his expertise gained from previous experiences in communal living. He also actively participates in general assemblies, ensuring efficient decision-making processes and the overall success of the project.

Table 4: Facilitator figures mentioned by interviewees

Project	Pseudonym	Designation by the interviewee(s)	Roles mentioned
1	Stéphane	"Coach"	Decision-making assistance; Facilitation in planning project stages; Facilitation in structuring and organizing the group; Legal assistance, formal document preparation, etc.
1	Not named		Occasionally facilitating a meeting
2	Albert		Facilitation in implementing certain tools like sociocracy, although it was briefly mentioned as they left the project quickly
2	Elise		Implementation of alternative tools to democracy; Facilitating in decision-making
2	Thomas	"AMO" (French) (Project manager)	Contact with other stakeholders, such as architects and engineers; Assistance in defining the budget; Technical assistance in construction (material choices, etc.)
3	Céline	"Coach"	Facilitating meetings; Facilitation in the implementation of sociocracy tools
3	Not named	External organizations anonymized	Assistance in putting together the financial plan

However, as seen in other instances, the role of facilitators is not without its complexities. These facilitators must strike a delicate balance, offering guidance and mediation without imposing their personal preferences, thus building trust and collaboration within the group. Their evolving role remains vital in addressing the diverse challenges faced by cohousing communities and guiding them toward successful project realization while respecting residents' autonomy.

5. Discussion

5.1 Limits of indirect communication

The collective housing model's reliance on smaller circles for decision-making and task distribution, while improving efficiency, also introduces complexities in participation equity and the integration of individual preferences into architectural decisions. These challenges underscore the delicate balance between collective goals and personal desires, highlighting the importance of inclusive communication and representation in collaborative housing projects.

In his interview, Laurent (Architect, Project 1) describes his adaptable approach, facilitating group dynamics and incorporating resident feedback, which highlights the significance of active communication and participation in navigating the complexities of group decision-making, all while aligning with the project's architectural and environmental goals. In this same project, Stéphane (user-client, Project 1) is mentioned as a guiding figure by his peers, embodying the essential role of facilitators in organizing and structuring the groups. His role includes providing advice on optimal group operations, defining roles within workgroups, and planning meetings, utilizing his extensive experience in communal living. Stéphane's role extends to active participation in general assemblies, contributing to the project's efficient decision-making processes and its overall success.

Despite the posture of the architect – in this case prone to participation –, residents such as Claire, Simon, and Martin report challenges in fully addressing individual preferences. They mention unmet specific needs, indicating a gap in effective communication and decision-making. This suggests that even with a proactive architectural and facilitation approach, the process may still overlook individual requests due to the generalized representation of desires and the bias of indirect communication.

The reliance on an intermediary architecture subgroup, while beneficial for maintaining focus, necessitates a clear understanding of its limitations and the importance of direct engagement with the entire community at key project phases. Recognizing the need for trust in the architecture subgroup and prioritizing scheduled community meetings can mitigate potential disparities in influence and ensure more inclusive architectural decision-making.

5.2 Architects relegated to service provider?

Amidst pragmatic concerns and other value-based issues, this paper reimagines some aspects of the architects' role in cohousing projects. In light of these evolving roles, the question arises as to whether architects are increasingly shifting to the status of service providers. The shift from the socially engaged, activist architects of the 1970s to architects positioned as technical service providers has been noticeable in contemporary cohousing endeavors. The selection of architects in recent projects tends to be primarily based on technical and pragmatic references, rather than their dedication to communal living. Consequently, architects often opt for a more pragmatic approach, focusing on the practical management of groups rather than actively collaborating with the entire community. This initial detachment sets the architect apart from the collective spirit of the community and characterizes the divergence between today's architects and those in the 1970s.

The question persists as to whether architects with substantial expertise in such projects could potentially assume a more guiding role throughout the architectural design process. The participation, expertise, and active engagement of residents in their projects prompt a reevaluation of the architect's place and role within the group. In cases where residents have already initiated extensive discussions and deliberations concerning their architectural project before the architect's involvement, the architect's role may become more consultative than proactive, adjusting to the group's pre-established plans.

The discontinuation of Project 3 was attributed primarily to issues arising from group dynamics and financial management, as conveyed by participants Laura and Florence, who perceived these challenges as externalities rather than intrinsically tied to the architect's involvement. However, this perspective prompts a reconsideration of the architect's potential oversight role in addressing such concerns.

In the exploration of collaborative housing projects, the role of skilled individuals within groups has emerged as paramount for guiding technical and organizational matters. Jules (Architect, Project 2) emphasized the significance of such expertise, citing Georges (user-client, Project 2) as a prime example of a user-client assuming the critical facilitator role, thereby enhancing the group's dynamic.

This shift towards recognizing not only the professional expertise of architects but also the necessity for facilitation skills reflects a broader trend in collaborative design practices. As Schelings et al. (2020) noted, designers are increasingly valued for their ability to navigate group dynamics and decision-making processes, marking a potential expansion of their traditional roles. Therefore, the potential of architects to serve as facilitators within cohousing projects introduces a nuanced landscape of roles and responsibilities.

While architects could have these skills and competencies, their involvement as facilitators could lead to conflicts of interest, especially when balancing the autonomy and input of residents with architectural decisions. This tension is illustrated in Project 1, where architectural and aesthetic decisions, such as the imposition of aluminum window frames, showcased a possible bias and highlighted the complexity of ensuring that all voices are heard and valued.

The role of the architect, then, may evolve to encompass a spectrum of facilitative tasks, such as budgeting assistance, decision-making support, project stage planning, group structuring, legal documentation, meeting facilitation, technical construction assistance, and liaising with other stakeholders (suggestions based on table 4).

However, the adoption of such a broadened role is not without its challenges. The previously mentioned conflict of interest may arise and would demand a reconsideration of the architect's traditional position, urging a shift towards a more collaborative, consultative approach that prioritizes the communal vision over unilateral design decisions.

Furthermore, the comprehensive involvement of architects in cohousing projects, embracing both traditional design and expanded facilitative roles, necessitates a substantial time commitment and expertise. Therefore, architects must receive not only fair compensation for this additional workload but also due recognition and value for their contributions. This acknowledgment should extend beyond financial remuneration to include professional recognition of the breadth of skills employed in these roles.

This shift might also necessitate additional training for architects to acquire the soft skills required for effective facilitation and conflict resolution. By doing so, architects can be better prepared to meet the diverse needs of nowadays cohousing projects, armed with a broadened skill set for effective collaboration and decision-making.

This reimagined role of architects within cohousing projects aligns with the need for a delicate balance between professional expertise and the collective agency of residents. Drawing on the insights of Détienne et al. (2019) and the conditions for successful group functioning outlined by Le Bail (2018), it becomes clear that the integration of shared values, active community involvement, and structured organizational practices are crucial for harmonious project development. The model proposed by Gicquel (2021) further supports this view, suggesting that the equilibrium of a project hinges on shared governance, compassionate communication, and effective project management.

Ultimately, the redefinition of architectural roles within cohousing projects speaks to a broader imperative to foster environments where collaborative visions can thrive, supported by both the technical expertise of architects and the active engagement of all community members. This collaborative ethos, underpinned by shared values and goals, sets the stage for negotiating design decisions and navigating the complexities inherent in bringing diverse visions to life, thereby reshaping the traditional boundaries of architectural practice in the context of cohousing projects.

6. Conclusion

6.1 Contribution

Through a comprehensive methodology and case study analysis, the paper sheds light on the multifaceted nature of collaborative architectural processes and their impact on cohousing

design projects. The emergence of new housing forms, particularly cohousing, and collaborative architectural processes, represents a significant shift in the way communities approach housing. These innovative approaches prioritize community, sustainability, and individual empowerment. This paper contributes valuable insights into the challenges and opportunities posed by these evolving housing paradigms, highlighting the delicate balance between values and pragmatism that must underpin successful cohousing projects.

This paper exposes the architect's position within a collective dynamic, raising challenges and opportunities from both resident and architect perspectives. A distinctive approach to collaboration and participation, through establishing intermediary working groups, is a recurring theme across the case studies. While shielding architects from internal debates, this approach raises issues about the limitations of indirect communication, potentially prompting the architectural community to reconsider the dynamics of collaboration and engagement in the evolving landscape of cohousing and architectural practice.

This research advocates for the capacity of self-promoted cohousing projects to contribute to the reflection and reimagination of architects' roles as potential facilitators. By emphasizing the collaborative nature of architecture and cohousing, this study reinforces the connection between the two and demonstrates the potential of further exploration of alternative design methodologies for cohousing projects, fostering a more holistic and participatory approach to architecture and community development.

6.2 Research limitations

This research is subject to certain limitations that must be acknowledged. Even though this research could inform other cohousing stakeholders, the results are contextual to these three cases.

A notable constraint is the inherent bias in the data collection process, stemming from only residents who remained in the community until the end of the process. This selection bias could have skewed the findings towards more positive perceptions of the decision-making process, but the results still show the dissatisfaction that arose. However, the perception of user-clients who left could have offered a more critical view of the challenges and inefficiencies within these collective housing models. Reflecting on this limitation, a comprehensive understanding of these dynamics could be completed by including the experiences of both current and former members, thereby offering a fuller picture of the complexities and challenges inherent in collaborative living and decision-making practices.

6.3 Further perspective: Opening up to living together

The emergence of new housing forms, particularly cohousing, and collaborative architectural processes, represents a significant shift in how communities approach housing. These innovative approaches prioritize community, sustainability, and individual empowerment. This paper contributes valuable insights into the challenges and opportunities posed by these evolving housing paradigms. By emphasizing the resilience of cohousing communities entrusting collective intelligence, it offers a framework to navigate the complexities of group

decision-making and collaborative design, which can inform architectural practice more broadly.

Group objectives focus on fostering collaboration among members, promoting solidarity, and encouraging responsibility towards others, sometimes prioritizing collective interests over individual ones. Shared governance demands active participation and a genuine shared objective defined by all members. Sharing responsibilities involves personal engagement, extensive involvement, emotional commitment, long-term persistence, and potential financial contributions. Striking that balance can be intricate, and implementing control measures, while necessary, may inadvertently homogenize groups and exclude individuals with less time or financial resources, raising questions about inclusive access to these communities.

The implications of these insights extend beyond cohousing, resonating with the broader field of design, as they prompt reevaluations of existing norms, encouraging a transition towards more inclusive, community-focused, and sustainable ways of designing and living together. Further research could explore challenging the traditional property ownership models within these projects, hinting at a potential transformation in how we perceive and structure-property rights.

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7. References

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