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Published in:
Transforming our World through Universal Design for Human Development

DOI:
[10.3233/SHTI220834](https://doi.org/10.3233/SHTI220834)

Published: 02/09/2022

Document Version
Publisher's PDF, also known as Version of record

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Please cite the original version:
Pirinen, A. (2022). Housing Development for All?: Learnings from the Ars Longa Case. In I. Garofolo, G. Bencini, & A. Arengi (Eds.), *Transforming our World through Universal Design for Human Development: Proceedings of the Sixth International Conference on Universal Design (UD2022)* (Vol. 297, pp. 159–166). (Studies in Health Technology and Informatics; Vol. 297). IOS Press. <https://doi.org/10.3233/SHTI220834>

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Housing Development for All? Learnings from the Ars Longa Case

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Abstract. This paper discusses the prerequisites of inclusive housing development based on the learnings from Ars Longa, a block of flats for artists, designers and authors in Helsinki, Finland, that was initiated by a group of elderly persons. The study draws from research on co-design and universal design in housing. Post Occupancy Evaluation is used as method of investigation. Interviews with four key actors trace the barriers and enabling factors in the housing development process and assess the final design outcome. The results highlight the role of public institutions in supporting resident-driven projects, the financing of projects as major barrier to laypeople, and the potential of concept design in integrating the needs of stakeholders. Joint design with adjacent plots made extensive shared spaces feasible and clever design moves enabled spatial flexibility, whereas the connection of co-design activities to building design was deemed weak. The study shows that continuous management and community building are needed for negotiating the use of spaces and for fostering agency and belonging among residents. The paper contributes to research on inclusive housing development through an empirical case.

Keywords. Co-Design, Housing Development, Inclusive Design, Post Occupancy Evaluation, Senior Housing

1. Introduction – The Systemic Design Challenge of Inclusive Housing

The ageing of the society, growth of solo living and loneliness, and high cost of housing in cities create demand for more social and affordable forms of urban housing for senior citizens as well as for other resident groups. Within the expert-driven housing system, ageing individuals have traditionally been perceived as a homogeneous group with no capabilities or skills in contributing to the design and development of housing. However, in light of recent examples of innovative housing projects initiated by groups of elderly persons, along with research on participatory design and co-design in housing, it seems evident that elderly persons can have valuable skills and knowledge that could potentially be harnessed for improving the offering of housing also for broader markets [1 p. 427].

Various approaches and methods for realizing resident-driven and communal urban housing have emerged globally, such as group construction and co-housing with extensive community engagement [2, 3]. In Europe, multi-generational housing that connects different age groups and family types is a growing trend [4]. Examples of novel communal housing projects in Helsinki include the Loppukiri (Sprint) senior house with services provided by the residents and Sukupolvienkortteli (Generations Block) multi-generational complex. These projects have had varying degree of resident participation.

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Housing pilots arising from social innovation, diversifying lifestyles and people's everyday needs suggest empowerment and transformative agency of residents in the face of the housing system [5 pp. 57–8, 6 p. 33]. However, as attested by previous research, resident-developers meet considerable systemic barriers when trying to get their ideas realized [7 p. 312]. Supporting user-driven residential development is a multi-faceted challenge to authorities, housing developers, architects, financiers and other professionals, that requires new design competences, tools and shifts in attitude [1, 6 pp. 40–1]. Recognized gaps in resident-driven housing include translation of user needs into actual design features and sharing of knowledge beyond singular projects [7 p. 185, 211].

The framework of universal design opens up further ways for examining resident-driven housing development [8 pp. 177–80]. In this light, truly inclusive housing would not only require physical, cognitive and social inclusivity of housing as artefact, but also the housing development process should be accessible to “all” people. Would such a goal be viable, what would it mean for design and what kind of obstacles are on its way?

This paper discusses the prerequisites of more inclusive and collaborative housing development based on the learnings from one real-life case, the Ars Longa house. The research interest is twofold: to trace the impediments and enabling factors in its development process, and to evaluate the design outcome in use from the perspective of key stakeholders. The study is grounded on research in universal design and co-design. Post Occupancy Evaluation [9] through interviews, observations and analysis of design documents has been utilized as the primary method. The paper seeks to extend the assessment of the inclusivity of housing towards the housing development process.

2. The Ars Longa House and Viehe Block

The Ars Longa house is a communal block of flats for artists, authors and designers who are over 55 years old (<https://arslongatalo.fi>). The eight-story house, finished in 2020, has 54 rental apartments ranging from 40 m² studios to three-room apartments with 63 m². In addition, there are two rentable atelier apartments on the top floor. Situated in the new urban area of Verkkosaari in Helsinki, Ars Longa is part of Viehe block that combines three adjacent plots into one building with extensive shared facilities. The other plots contain affordable housing for young people offered by The Finnish Youth Housing Association NAL, and student housing owned by Setlementiasunnot, another non-profit housing provider. The whole block was developed as one project.

Ars Longa was initiated in 2012 by a small group of elderly persons with background in design and applied arts. They founded the Ornamo Senior House Association (OSHA) under the auspices of the national association of designers, Ornamo. At the suggestion of city officials, the association partnered up with Finnish Artists' Studio Foundation, a professional owner of studio spaces, to successfully apply for a building plot from the city. The Ars Longa team soon begun to collaborate with the builders on neighboring plots to develop the Viehe block as one project. Later, due to difficulties in obtaining the required self-financing, The Union of Finnish Writers and copyright society Kuvasto joined as partners in Ars Longa, expanding the target group from designers to authors and artists. The house is owned by a real estate company formed by the four organizations.

The objectives of Ars Longa as defined by the protagonists [1 pp. 421–2] were to build a *senior house for designers* that would combine *communal living* based on shared professional background with *affordability* to comply with the lower-than-average income level of many elderly designers. The building should be physically *accessible*

and offer a functionally and aesthetically *well-designed* environment despite the economic constraints. There was to be *versatile shared spaces* and *flexible dwellings* adapting to different needs and lifestyles. An important goal was to support *artistic and creative practices* even in old age. Ars Longa was envisioned as a testbed for transmitting the cultural impact of the residents to the neighborhood and as a duplicable pilot concept.



Figure 1. Viehe block with Ars Longa house in the front, and view from a co-design workshop where its floor plans were evaluated by the Ars Longa community. Photos by the author, 2020 and 2016.

3. Research Method and Data

This paper is based on a longitudinal follow-up study of the development process of the Ars Longa house. The research material consists of thematic interviews with key persons in the project. Design documents, photos and other materials have also been utilized. In addition, lightweight observation and Post Occupancy Evaluation of the finished building has been conducted to identify how the initial design goals were realized and how the building serves the everyday living practices of the resident community.

Post Occupancy Evaluation (POE) provides a systematic approach for evaluating buildings from the perspective of users and other stakeholders after they have been built and occupied for some time [9 p. 3]. The method can be utilized as a diagnostic tool for identifying problems in buildings, for co-improving buildings based on stakeholder recommendations, for testing new design prototypes, or for developing design guidelines and visions beyond singular buildings. POE typically makes use of observation, interviews and surveys to gather qualitative knowledge about the occupants' experiences, sometimes combined with monitoring of user behavior, usage of spaces or technical performance. [9 p. 5, 57, 70.] Recent research has highlighted the need for more critical and socially oriented POE as means towards responsible and inclusive architecture [10].

Four persons who have been actively involved in the Ars Longa project between 2012 and 2022 were interviewed for this study. The interviewees included an elderly designer-artist who originally started to further the Ars Longa house and now resides there (*The Initiator*), an architect and director of the Artists' Studio Foundation who represented Ars Longa in the building project (*The Developer*), the former managing director of the social housing provider Setlementiasunnot which was one of the three partners in Viehe (*The Leader*), and the principal architect of the Viehe block (*The Architect*). In addition, the study draws from the personal observations of the author (*The Researcher*), who has been following the project since its infancy.

The role and duration of involvement of the interviewees is reflected in their account of the case (see Figure 2). Only The Initiator had experienced the entire path from the idea to the occupied building (2012–), while The Developer had joined later (2014–) and was living elsewhere. The Leader was only active in the development stage (2014–2018) and The Architect’s role was focused in the design and building phase (2016–2019).

The semi-structured interviews were conducted by the author in 2022. They covered the initial goals of the project and the participants’ role in it; the project timeline and its key turning points; mapping the network of stakeholders and assessing their contribution; evaluating the finished building; and discussing the case from the perspectives of universal design and the general prerequisites of inclusive housing. The interviews were audio recorded and transcribed. Analysis of the material followed the principles of qualitative content analysis [11 p. 6]. The transcripts were read closely in light of the research question and key insights coded and grouped into broader categories.

4. Tracing the Development Journey and Evaluating the Building in Use

The development process of Ars Longa from idea to occupied building could be divided into four main phases (see Figure 2), three of which relate to the housing development process while the last focuses on the finished and occupied building. In each phase, a *dominant design challenge* was identified, the solving of which would contribute to the inclusivity of resident-driven housing development. The design challenges are opened up in the following through tracing the enablers and challenges in the Ars Longa case.

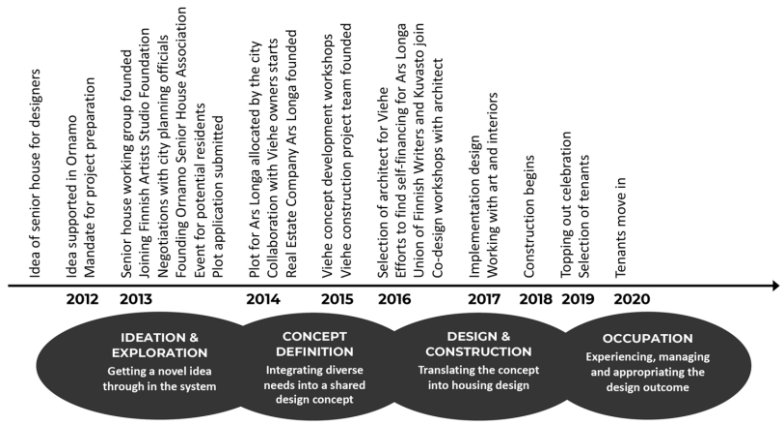


Figure 2. Timeline of Ars Longa and the four main phases with dominant design challenges.

4.1. Ideation and exploration – Getting a novel idea through in the system

The key driving force that made Ars Longa reality was the *persistence* of the resident-developers who voluntarily pursued the complex task of developing housing for seniors in their own field, motivated not only by personal housing needs but a dream of developing affordable and socially supportive housing for colleagues in more vulnerable position. There were hesitations, as recounted by The Initiator: “I said that I can’t, but then I thought about it at home and started to think that it might be an exciting thing”. Aware of her lack of knowledge, she started to gather information, contact experts and

write a memorandum about the idea. The founding of OSHA brought in more hands and more diverse expertise, and the project started to gain momentum.

An early turning point was the meeting with a city planning official that led to merging of interests with the Artists' Studio Foundation and allocation of a building plot for Ars Longa by the city. Here, personal networks and chance played a part. However, the role of *municipality and state* as enablers of resident-driven projects through city planning, plot allocation, financing and design regulations is important to note. After social rental housing was decided as the tenure model, the governmental Housing Finance and Development Centre in Finland (ARA) became a source of support. The terms of ARA production also created challenges, such as tight economic framework, limitations to the allowed area of shared spaces, and rigid criteria for tenant selection.

Financing of resident-driven projects emerged as a major challenge. "I don't know how we could be so ignorant about the fact that you can't build a rental house without money", exclaimed The Initiator: "Not having [funding] caused terrible anxiety". This not only concerned the construction, but also the early exploration and co-design work. Later on, Ars Longa did not succeed in securing the required 5% share of self-financing, as there were few institutions willing to fund this type of project. The project was only made possible by taking in the more established organizations of authors and artists, meaning that only 10 of the 54 apartments are now allocated for designers.

4.2. Concept definition – Integrating diverse needs into a shared design concept

The development phase of Viehe was characterized by much deeper *collaboration* between stakeholders than is customary in social rental housing. This was instigated by external and internal factors, starting from the city plan and plot allocation terms that designated the block for communal housing. The innovation of voluntarily combining three adjacent projects necessitated yet deeper collaboration, as did the involvement of laypeople via Ars Longa. While also causing complexity and uncertainty to the project, collaboration brought significant mutual value, most notably through the extensive shared facilities and savings made possible by designing the block as one. For Ars Longa, teaming up with experienced developers was crucial in getting the house realized.

Careful contracts and planning of processes and responsibilities were mentioned as requisites of multi-stakeholder collaboration. But professionals' personal motivation and willingness to step out of familiar roles to work with "others" were deemed equally important. The Leader emphasized the role of informal activities such as common meals and general "fooling around" in creating trust, commitment and sense of community among stakeholders. However, other interviewees noted that the enthusiasm somewhat waned after the visionary persons changed and the "hard" construction process took over.

The value of *concept design* in integrating the needs of stakeholders, creating a joint vision and setting specifications for building design was stressed by The Leader. He argued that housing producers are too attuned to building design, while using time for defining the spatial and service concept together with residents and professionals would be beneficial for realizing user value and creating innovative solutions. The concept could also mediate between the users and the architect. However, the architect should be involved early on. In Viehe, the concepting activities included co-design workshops about user needs and the spatial program, facilitated by The Leader and a service designer.

An interesting finding is the *transfer of knowledge* from reference projects and previous experiences of the stakeholders to the development process. The Ars Longa team visited the Färdknäppen communal senior house in Stockholm and studied the

Loppukiri house. They also commissioned a report on international case examples from The Researcher. The Leader relied on German co-operative housing and the Generations Block as references in concept design and The Developer brought in her learnings from a communal group construction project where she was also living.

4.3. Design and construction – Translating the concept into housing design

When the development journey proceeded to building design and execution phase, the stewardship of design was taken over by The Architect and the building project managers. The interests of Ars Longa were now guarded by The Developer, whose experience in housing production was deemed an essential success factor. OSHA members also participated to the design process. Here, translation of the needs of Ars Longa and the joint Viehe concept into the actual housing design solution became a central issue.

The interviewees voiced concerns about the *low impact of participation* to building design. The Ars Longa community felt that the architects were not very responsive to their input and seemed annoyed when someone suggested changes to the design, possibly due to perceived threat of user participation to their professional sovereignty. As put by one interviewee, “Engagement with residents perhaps wasn’t so pleasant to them in the end. But it was the right thing to say in the [tendering] interview to get chosen”.

From the experts’ side, The Architect pointed out that right timing of participation would be essential for it to be effective. Similarly, The Leader opined that focus on truly participatory concept design would be more fruitful than tinkering with architectural details and criticizing building plans. The experts in this phase clearly focused on the production pipeline and valued an effective and *experienced project team* over working with residents in refining their ideas. In Viehe, most of the actual residents were also not known. As means to deepen resident participation, the experts suggested adding clear criteria about participation to ARA regulations and city plot allocation terms. An attitude change among experts would also be necessary to work with “amateurs”.

Despite their criticism, the Ars Longa team was able to influence the design of the house to some extent and to bring in their *expertise in art and design*. They determined the spatial program and distribution of apartment types in Ars Longa, informed by a survey to the target group, commented the floor plans, and commissioned an accessibility evaluation. Early on, the team got the idea of open plan apartments to serve combination of living and working. There is now one two-room apartment per floor where the divisive wall is replaced by a curtain rail. The elderly designers also suggested improvements to colors, lighting and materials, and selected some furnishings to shared spaces. There were working groups in art and gardening, and an artwork was realized to the facade.

As an interesting example of the architect’s skills in solving user needs in a creative way, *clever design moves* enabling flexible (mis)use of space and overcoming the strict ARA regulations on shared spaces were introduced in the building design. The Ars Longa developers wanted to have a gallery space in the street level for exhibiting their work, organizing events and communicating the identity of the house. This was made possible by adding large windows and other details to a space officially designated as bicycle storage. It is now run as a gallery and forms the heart of the community.

4.4. Occupation – Experiencing, managing and appropriating the design outcome

Assessing the finished building and its design features (see Figure 3), the interviewees were satisfied with the final outcome and getting the building realized. *Positive features*

included the efficient overall concept of the block, the array of shared spaces resulting from the joint project, and the functionality and accessibility of the building. The top floor with terrace and the interior circulation routes were also considered successful. As for *negative features*, the quality of interiors, lighting and furnishings in the common spaces was deemed poor. This could have been avoided by using an interior architect. Another mishap was the closed parapet around the roof terrace obstructing the view from some apartments. Electronic locks and heating regulation had also caused problems.

The *sense of community in Ars Longa*, social activities and gallery space were praised by the interviewees. The residents were running the art gallery with the help of interns and volunteers and it made the artistic identity of the house visible even in the neighborhood. Also, the top-floor clubroom was in active use and the residents had taken over a storage space on the ground floor that they were using as crafts workshop. This shows active agency in appropriating the spatial resources to community needs.

By contrast, the relationship between the Ars Longa people and tenants in the other two houses in Viehe, mostly students and young people in their twenties, was distant. Some elderly residents had met rude behavior or felt unwelcomed when using the common spaces and would have preferred to have some spaces only for Ars Longa. Evidently, *forced multi-generational living* doesn't provide the same social value than voluntary multi-generational communities, and can even be a source of friction.

Another impediment met by active residents trying to adapt and improve the spaces was the *hierarchic joint management* of the block led by property managers. Introducing any changes was slow or easily overruled. The study indicates that shared facilities are important enablers of communal living, but continuous management, negotiation and community building are needed for the housing community to thrive. Resident control and ability to appropriate the building over time can support inclusivity and belonging.



Figure 3. Features of the Viehe block. Communal kitchen and art gallery at street level, clubroom and green roof terrace on the top floor. Photos by the author, 2020–2022.

5. Conclusion – Housing Development for All?

Following the Ars Longa case revealed factors in the Finnish housing system that impact the success of resident-driven housing development and its accessibility to laypeople innovators. The development journey could be divided into four main phases with dominant design challenges. In the ideation and exploration phase, the main challenge was to get a novel idea arising from social needs to be picked up in the housing system. In the concept definition phase, integrating the needs of diverse stakeholders into a viable spatial and service concept to steer building design emerged as the main challenge. In the building design and construction phase, the concept needed to be translated into

concrete design features. Finally, the occupation phase called attention to experiencing, managing and appropriating the design outcome over time by the residential community.

The study revealed breaks between the phases that disrupt the continuity from user needs to housing solutions. One gap was identified between concept design and building design. Other major barriers were difficulties in obtaining financing to resident-driven projects and systemic resistance to real resident impact in building design. Improving the accessibility of housing development would require support from cities and public institutions in financing of projects, guidance and services for resident-developers, and truly inclusive concept creation and co-design methods in housing. Focus on concept level design in steering building design can help in integrating the goals of stakeholders. Moreover, regulations and design guidelines should have more flexibility to changing uses and residential needs, and set explicit criteria for resident participation.

The main research contribution of the paper is identification of factors that impact the inclusivity of housing development and design. The study suggests that principles of universal design and the POE method could be extended to evaluating the housing development process. Limitations of the study include the small sample and provisory theoretical framework. Further research would be needed to validate the findings.

In the end, the protagonists of Ars Longa succeeded in their endeavor through persistence and collaboration with other actors. The role of city and government was instrumental, as was the teaming up with experienced professional builders. Joint development and concept design of Viehe enabled extensive shared spaces within the tight constraints, and clever design moves induced spatial flexibility. The residents brought in their own expertise in art and design and a strong sense of community.

The context of social rental housing also opens up broader questions about inclusive and socially responsible housing innovation. Here, the actors were not just designing housing for themselves, but serving a wider community. Indeed, non-profit rental housing may offer special advantages for cultivating novel housing solutions. However, as stressed by The Leader: “[P]eople with less resources need builders who are interested in getting to know this particular target group and responding to their needs”.

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