

Figure 1. Vision for a community architecture.

"All is as it should be", says one of the beings.

"Nothing is complete", returns the other;

"look at those creatures below this mountain, whom we see assembling, then disbursing, looking about, and betaking themselves to shelter."

Prologue, The Habitations of Man in All Ages, by Viollet-le-Duc, translated by Benjamin Bucknall, Architect. 1876.

EVOLVING METHODS OF CONSTRUCTION IN SELF-BUILD COMMUNITIES

Can domestic architecture become an extension of ourselves, more like a human product than a fixed monument? 1. ABSTRACT

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Figure 2. Sketch of Walters Way cul-de-sac, by Walter Segal

ABSTRACT

When trying to rethink architecture in a contemporary and visionary way, we must alter the constraints within our mind of what architecture is or should be. The development in our architectural practices over centuries allowed the evolution of urban space and our built environment. One architect who revolutionised the way we build is the Swiss architect Walter Segal (1907-1985). Among his contributions to architecture is an opportunity to change our wasteful practice and to create for ourselves a more conscious and humane built environment. The focus of this dissertation will be his work and the self-build movement that he started, looking specifically at the Walters Way and Segal Close self-built housing schemes in Lewisham. His approach to a vernacular architecture revolutionised the way we self-build houses by simplifying the process of building from start to finish, enabling people without building experience to build their own houses and enjoy the sense of achievement and develop new skills that they acquire from this experiment. This dissertation will trace the Segal's architectural journey and the

community spirit that he helped form and concludes with reflections on the future of the self-build movement in response to growing demands for urban housing and the possibility of transforming discarded waste into building materials.

INTRODUCTION

This dissertation examines the work of Swiss architect Walter Segal (1907–1985) whose self-build houses which were built on the principles of low-cost construction and affordable housing¹. One of the strengths in Segal's selfbuild method when it was developed was the use of readily available natural materials to create lightweight timber structures inspired by traditional Japanese architecture. His method minimised the need for excessive foundations and specialist skills and worked well on a limited urban scale. Adaptation to a large urban scale required evolution and a great deal of adaptability in the original method. And whether or not this adaptation is possible, it is worth noting that his work has inspired many other alternative self-build projects. These projects, such as the RUSS large self-build housing development, are in many ways improved versions of the Segal method.



Figure 3. The self-built community of Walters Way, on a site visit, 2021

¹ Taran Wilkhu and Alice Grahame, *Celebrating Segal: Walters Way & Segal Close* (London, 2016), 14.

This dissertation explores the strengths and weaknesses of Segal's ideas and methods and their potential to be implemented on a larger urban scale. As we will see in the following chapters, these alternative projects have the potential to build extensive affordable social housing including self-built educational community centres and refugees' shelters. There are, however, two major constraints on sustainability: economics and the environment. This dissertation concludes with reflections on the future of the self-build movement in response to growing demands for affordable urban housing and the possibility of transforming discarded waste into building materials.

WALTER SEGAL'S COMMUNITY ARCHITECTURE OF THE 70s

Walter Segal (1907–1985) was a Swiss-born architect, engineer and intellectual. He started the Segal Method for which he is best known today but his contribution to the architecture of the 70s-80s is of equally great value and appreciation.

The self-build movement inspired by Segal, started with his first temporary family house which attracted interest for the economical and efficient method of construction in which it was built. But to understand the working method that he developed over his career as an architect, we must begin from his first steps towards architecture and what led him to this path.

When referring to his childhood experience growing up amongst Bauhaus artists and intellectuals such as Walter Gropius (1883-1969) and Bruno Taut (1880-1938), he would often remember it with a sentiment of moral insanity². According to him, he never really fitted in and often prefer to keep to himself, most of the time finding himself engaged in exploring the outdoors. His natural curiosity for building and crafting from an early age, compelled him towards architecture, but it was Le



Figure 4. Walter and Ken, working together on one of the selfbuilt houses in the Lewisham housing scheme.

² John McKean, "Becoming An Architect In Europe Between The Wars:", *Architectural History : Journal Of The Society Of Architectural Historians Of Great Britain*, 39 (1996), 124.

Corbusier's (1887-1965) early architectural drawings that inspired in Segal a form of architecture which he could understand and admire. Although he grew up under the influence of Bauhaus architects such as Marcel Breuer (1902- 1981) and Mies van der Rohe (1886-1969), Walter remained faithful to his continuous appreciation for the "ordinary"³ and looked to develop an understanding for simple and practical building design, using traditional construction methods.

After having completed his first architecture school, where he started to build a practical understanding for structural engineering, Walter's interest was to explore the potentiality of structural forms and theories. Once again, his early infatuation with the "ordinary" informed his path in architecture, as he chose to follow an ordinary form of architectural education over the influential Bauhaus school⁴, which in his opinion would fail to satisfy his need for developing an understanding of structural engineering and architectural theory.

³ lbd., 128.

Perhaps what helped shape his architectural style, was his relationship with Bruno Taut and the Poelzig's seminar in 1929. When commenting on Taut's architecture, Walter appreciated the element of utility and conscious detachment from the abstract in Taut's buildings. And so, with years he came to appreciate Taut's position in the contemporary architecture of the 1920's⁵, and to adopt a similar appreciation for utility in design. And while his relationship with Bruno relied on equality and shared interests in the architecture of the 'modern' movement,



Figure 5. Bruno Taut's no.19 modernist house, demolished in 1959-60.

Poelzig's seminars showed him the importance of collective criticism through long and intensive debates. Segal understood that the aim of these 'crits'⁶, an unprecedented phenomenon in the architectural education of that time, was to help him develop his personal voice and critical thinking. This experience marked Segal's work in the sense that it enabled him to further develop his lifelong intention in architecture. To be more exact, he realised that the best way to prove his way is the only possible way, is through systematic attempts at eliminating all design possibilities until only a few right ones are left⁷. He implemented this failproof method throughout his studies and work as an architect, striving to be as independent and self-sufficient in his work as possible.

His early layouts were perceived as improved version of Le Corbusier's two storey house plans, where the element of the staircase acted as a spatial divider which separated the two main living spaces, elements of planning which are, from Segal's perspective, crucial in any dwelling⁸. These layouts were the



⁷ lbd.





⁸ lbd., 137

inspiration of his first small terrace-house design for a competition entry, in 1932, which in character with Le Corbusier's two-storey terrace houses, has the staircase at a central location on plan acting as a binding element between the two living spaces.

Jumping to his later plans that he published in his 1948 book, *Home and Environment*, we can clearly recognize Segal's developed criteria⁹ at play in the way the staircase is shifted towards the front of the house to allow a zone for circulation. Unlike Le Corbusier's attitude towards celebrating the staircase as a central element of design within the living space, Segal's interest for utility informed his choice of celebrating the staircase for its practical nature while allowing an open view of the two main living spaces of a dwelling. Judging from his characteristic design style, we can conclude that while Segal admired the architectural experience created by Le Corbusier, his firm concerns with functionality and practicality in housing guided him towards an economical and comprehensive approach to design.



Figure 7. Segal's first built project, La casa piccola (1932), a summer house for his father's patrion.

⁹ Walter Segal, *Home And Environment* (London, 1948), 60.

His personal voice can be experienced in the carefully calculated and developed American-wood frame system, used in his first built project and improved in the Segal self-build method. Whilst he rebelled against the architectural education system of the 1920-30s¹⁰, during his Poelzig's seminar he learned the importance of developing his critical thinking. In Berlin he learned about structural engineering and specialised in timber and metal engineering. Finally, in Zurich, he learned the art of joinery. In 1936, he moved to London and enrolled at the AA Architectural Association, where he met his wife (a student there) and where he taught part-time. This helped consolidate his knowledge of building construction and – as we shall see – enabled him to make a change in Britain's post-war built environment. His honest and compassionate understanding of social inequality in housing and his interest in structural and economical building construction, which we have seen developing from his early designs to his first temporary small house, is what ultimately inspired Segal's Method.

Limitations to Segal's work from a socio-demographic perspective

Firstly, throughout his early work, he was mostly targeting single families, in accordance with the household demographics of the 1960s. This begs the question: how would his plan layouts facilitate the needs and habits of extended families, a single-person, disabled families, or elderly 'empty-nest' couples? We know that for a project to be successful we need to have targeted audience but considering the planning in question is for an economic housing scheme in a multi-cultural and socio-demographic landscape such as that of London, surely a wider range of demographics should have been calculated, as to avoid any social exclusion.

¹⁰ John McKean, "Becoming An Architect In Europe Between The Wars:", *Architectural History : Journal Of The Society Of Architectural Historians Of Great Britain*, 39 (1996), 141

The landscape of post-war Britain necessitated new higher standards of living which required a reinterpretation of traditional methods. In his work as an architect, Walter was an advocate of the relationship between the efficiency of a building and the standards of living on which it depends. His self-build method which empowered communities to design and build flexible living spaces was created with the same conscientiousness. In the same way, these self-built houses were designed with the capacity to grow with its users and adapt to their gradually changing needs for 'dwellings are social organisms formed to serve the requirements of living.'¹¹

¹¹ Walter Segal, *Home And Environment* (London, 1948), Introduction, 2.



Figure 8. The 'universal' plan, from Home And Environment

Secondly, his designs for modular singlefamily dwellings were a successful solution in the context of the post-war housing shortage in London. However, the lack of consideration for multi-generational households and the limited flexibility of his small house designs works as a limitation to his work. Similarly, being so focused on calculating the best economical construction method made it possible for him to achieve his goals in architecture, however this cost him a loss on the potential for future adaptability with the social structures of our time. Going back to his work that led to the self-build

houses, in the planning process of the proposed terrace houses in his 1948 book *Home And Environment*, he anticipates the habits in the daily life of his audience, which made his designs of that time so successful. His ability to put himself in the shoes of the users and visualise the various mundane scenarios in order to be able to calculate the best outcome for the

final dwelling, was his intended aim from the start of his architectural journey. An example of such consideration in planning is demonstrated in his book, while referring to the possible difficulties of a terrace house:

"it is desirable for at least one living room to open on to the garden, preferably to a small terrace. If, however, [...] if children would cross it continually while at play; if dirt and dust would be brought over the doorstep, then this arrangement would be unpopular with the housewife who has to do the cleaning."¹².

In the contemporary social context, his now dated comments assuming that the specific role in question falls only on the housewife, would not do justice to the versatile role of a professional working mother, whose role is not solely to clean and cook. Furthermore, his view that parents would prefer a rear garden as an open space where they can safely take their child out, informed the location of the garden in relation to the outbuilding¹³ (pram and bicycle storage) in his modified version of the 'universal plan'¹⁴. Should he have considered the same space but inhabited by a childless elderly couple or a disabled family, would this arrangement also suit the needs of the users in question? Would these users perhaps prefer the sunlight gain over the outbuilding?

¹² Ibid., 8.

¹³ Ibid., 9

¹⁴ Ibid., 13.

We will seek to answers these questions in the following sections, where we will discuss the formation of the Segal method and the evolution of this self-build movement into alternative self-built projects.



Figure 9. Range of basic plans included in the Lewisham self-built housing scheme.

THE ORIGINS OF THE SEGAL METHOD

The self-build movement inspired by Segal started with a temporary house for his family, which attracted interest for its economical and efficient construction methods. The members of the self-build community – individuals on the waiting for housing – were given a small plot of land considered unfit for conventional housing. Local council tenants were then given the opportunity to construct and ultimately own their homes. This self-build culture in Britain resulted from the perseverance of individuals such as the self-builders of the Lewisham self-built scheme. Today, the thirteen houses on Walter's Way, built from 1977 onwards, are a reminder of this culture and it represents the earliest low-cost self-build housing project in the country.

In a way, Segal's method opened the door to a more humane architecture. By showing concerns for function and comfort, its built purpose was to serve and adapt to its occupants' needs. The adaptable nature of this approach to self-built housing has proven to be an effective way of ensuring successful life cycle by extending the building's use beyond the standard 60-year life span. While the Segal method works well with standard building materials, such as plasterboard, woodwool slabs, and sections of timber, it avoids using new recycled materials of untested performance. This poses a considerable constraint on the idea of an architecture of self-expression and liberation, where any waste material can be converted into a useful part of the building process.

In terms of buildability, Segal developed a method of building using a modular timber frame system that allows for ease of construction and low maintenance whilst eliminating the need for bricklaying and plastering. In the typical traditional Japanese



Figure 10. Primary wood frame developed for the self-built method.

house called 'Minka'¹⁵, the design differs with each house as to accommodate the needs of its occupants. But the environmental concerns and integration of the building into the site, together with the use of a post-and-beam primary structure and movable partitions as secondary structure, are the main structural elements of a 'Minka'.

The materiality and construction of a Segal self-built house has many similarities with this type of vernacular architecture, especially in the wood construction of the overhanging roof set on pillars. This design choice creates an open-plan area between the living space and the courtyard garden in a typical Segal's house. In the same character, the timber framing system is assembled by screwing together a wooden frame and infilling with building board and insulation¹⁶. The use of exposed post-and-beam timber frame, generally used in traditional Japanese 'Minka' house, allows the idiosyncrasies of timber to give each dwelling its individual character.

From an environmental point of view, this method of construction was the best solution for the constraints imposed by the topography of the site. Inspired by the Japanese mountain houses on stilts, Segal developed a building system using post-

¹⁵ Chuji Kawashima, Japan's Folk Architecture (Tokyo, 2000).

¹⁶ Brian Richardson and Jon Broome, *The Self-Build Book*, 2nd edn (1991), 183.

and-beam construction with foundation on stilts. The self-builders would have to dig the post's foundation holes in which the wood post would fit, these holes were then be filled with concrete and capped with a paving slab¹⁷. This method proved to be efficient while retaining as much of the existent vegetation as possible, such as the many mature trees on this site, including a Wellingtonia Redwood.

His enthusiasm for self-built houses extended beyond the discipline in the economic and waste free construction to the possibility of the selfbuilders becoming self-designers. For this, he developed an interactive device¹⁸ that worked as a modelling kit, allowing a selfbuilder with no architectural knowledge to produce buildable designs. The electronic panel-board allowed a rich variety of Walter's design



Figure 11. Example of site integration with the design of one of the self-built houses, on Walters Way.

rules and by scanning the color-coded panels on board, the device could generate plans and three-dimensional views, determine costs, and produce structural frame drawings.

While this device worked well with customising projects to meet the self-builder's living requirements, it was only able to provide a very rough estimate of the completion date, the total cost of the project, and the actual amount of work involved in the building process. It also lacked the knowledge of all the practical limitations in the Segal's self-build method. The main

¹⁷ Ibid. 62

¹⁸ John Frazer, An Evolutionary Architecture (London, 1995), 43.



Figure 12. The Walter Segal model.

limitation to the adaptability of this type of house, which only became evident in the construction phase, is the location of services such as plumbing and wiring¹⁹, as noted by the joint architect in the first self-built scheme, Jon Broome. In his book, The Self-build Book (1991), he also shares his experience in building his first Segal house, 6 Segal Close, and the difficulties he faced. Where Segal's method is intended to simplify the building process as much as possible, the actual construction of calculated and meticulously designed timber his framework required that each piece of that frame structure to be measured, cut, and fixed on site. This took a lot more time and effort than anticipated, as Jon admitted:

'One expected things to take twice as long as anticipated, but it was a bit of a shock to find that many things seemed to take three times as long! Having cut mitres on window

¹⁹ Brian Richardson and Jon Broome, *The Self-Build Book*, 2nd edn (1991), 51.

beads for what seemed like for ever, we worked out that the house required well over 1,000, each needing to be measured, marked, cut, adjusted and fixed!'²⁰

There are also positive outcomes of this tedious and elaborate work: the cooperation of the community, everyone helping in assembling the timber frame, sharing tools and knowledge. This resulted in a balanced mixed of individual and co-operative work that was used in the building process of each one of the self-build houses, creating an atmosphere of a family affair. The hard work and commitment of the self-builders involved in this housing scheme was greatly rewarded, with a comfortable and adaptable home built for their needs and a newly attained confidence in their practical skills and building knowledge.

THE FUTURE OF SELF-BUILT MOVEMENT IN COMMUNITY ARCHITECTURE

In our late-modern society, high-rise apartment block housing has gained popularity for its space-saving quality in areas with high density of population, such as London. The transition from the 'village' type of settlements to the high-density urban vertical housing, impacts the efficiency of the Segal's self-build. Inevitably, a re-evaluation and adaptation to the current social and environmental constraints is necessary for it to be implemented with the same utility and functionality as Segal intended decades ago. His focus on calculating the most economical and compact method of building aligned with his goals in architecture. And while working on a human scale allows for more community interaction, it lacks the future adaptability with the social structures of our time. Which begs the question: can his self-build designs be scaled up using modern methods of construction? And how would this adaptation affect the character of self-built modular houses?

²⁰ Ibid., 53.

Charles Correa (1930-2015), another architect faced with issue of land shortage and lack of affordable housing in the 70s, came up with a solution which relied on a low-rise courtyard housing scheme. His method²¹ was successful in achieving mass housing in a densely populated area, by forming clusters of seven to twelve pairs of houses, centred around communal courtyards. The dwellings, like Segal's, are built by the community, using traditional methods of construction and locally sourced basic materials. The negative space between these interconnected spaces created circulation routes,



while the courtyards served as the communal space. This layout created a more energetic and engaging experience of the architecture and gave it the character of a city and the adaptability to expand to a bigger scale. The housing scheme was designed around the principle of future expansion for a residents of various incomes. Each dwelling is built on its own plot of land with its own open space and grouped together with six more dwellings around the communal courtyard²². The concept behind this planning arrangement was to create a sense of individuality while retaining the community spirit, features which remain valued in contemporary housing. The Belapur landscape has changed drastically over the decades, being

Figure 13. Axonometric of the Belapur courtyard housing scheme.

 ²¹ Hasan-Uddin Khan, Charles Correa and Sherban Cantacuzino, *Charles Correa : Architect In India / Hasan-Uddin Khan ; With Essays By Sherban Cantacuzino And Charles Correa* (London, 1987), 70
²² Ibid.

replaced by high-rise housing scheme as a contemporary solution to the exponential population growth of Mumbai, several decades later²³.

However, like Segal's self-build movement, through careful analysis and planning, both architects were able to come up with the most effective long-term solution for the issues of that time, and while their housing projects requires adaptation to the current building regulations, they were successful in creating a community spirit which continues to persevere today.

Most of Segal's self-built houses that are in use today, would have had some restoration or extension work done to them to make sure they operate on acceptable standards of building regulations. No. 2 Walters Way, left unoccupied for years, is currently decaying, partly the reason for the extension proposal submitted by Jon Broome Architects, in 2013²⁴. Jon Broome was a joint architect in the first self-built scheme, working together with Segal on his own self-built house, so he was familiar with the building style and character of the site. His building extension proposal was designed in the same style, but conforming with the updated site constraints and current building standards. While designed in the same nature as the Segal houses, this improved version would use blockwork construction for the external walls, with external insulation and cladding to reduce noise pollution. The floor would be made of concrete beam and block, reducing the vibration of nearby heavy traffic and a green roof was added for economic benefits and biodiversity.

In many ways, this proposal resembles the original No.2 self-built house, with internal walls and roof structures, using an exposed timber framework allowing for a balanced mix of openness and privacy throughout the living spaces. It would be built

 ²³ Priyanka Chapekar, "Belapur Housing By Charles Correa: A Sense Of Home And Community - RTF | Rethinking The Future", *RTF* | *Rethinking The Future*, 2022
https://www.re-thinkingthefuture.com/case-studies/a3735-belapur-housing-by-charles-correa-a-sense-of-home-and-community/ [accessed 10 November 2021].
²⁴ HERITAGE STATEMENT (London, 2013) https://planning.lewisham.gov.uk/online-

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in an economical manner with environmental and social concerns in mind involving low-cost and waste-free construction to keep the carbon footprint to the lowest and to ensure an optimal operational energy. Moreover, the planning of this Segal inspired family house has a greater level of inclusivity for people of limited mobility or disabled people. This updated version of the Segal method is adapted to the current passive principles and could potentially present an affordable alternative to subsided mass social housing. As for the No.2 extension proposal, the planning application got refused by the Lewisham Council and the self-built house was left in the same frail condition to this day.

In our fast-paced built environment where housing has become scarce and dominated by mass built pre-designed houses, the idea of designing your 'dream house' is almost a fantasy. The material circumstances of a modern inhabitant's life are less a product of his connection with nature, and more a result of his or her relations with the social order. In a modern social context, young people looking for affordable housing in London, are still faced with the same limitations as the Lewisham council tenants in the first self-build scheme. Today, the main barrier in having more opportunities in this field is the access to land and whilst there is a clear shift in our political agenda towards self-build housing, more funding from the government is needed to support local council in facilitating this shift.

However, in thinking about the future of Segal's ideas, there are two major challenges to sustainability: how do we make selfbuild housing affordable? How do we adapt the self-build method so that it can upcycle waste materials for the purpose of building?

This first challenge is affordability. When housing is used as an economic tool, revenue increases to a level that the people living in this housing development can no longer afford to live there. A case in point is Walter's housing schemes, the value of which have increased exponentially with the popularity that it gained over time. In our modern society, the high-rise

apartment block type has gained popularity for its space saving quality in an area with such high density of population, such as London. Perhaps a more efficient method of providing high-density housing in a context of land shortage, population growth, house price inflation and lack of affordable housing is Correa's courtyard housing method. His solution to this problem relied on a low-rise courtyard housing scheme and was successful in achieving mass housing in the densely populated area of Mumbai. Perhaps, this is a matter of public investment in housing – will the state step in to provide 'help-to-build' affordable homes for low-income communities?

The second challenge is waste management. The construction of cities has created huge volumes of varied types of waste which rapidly transformed into worryingly vast mounds worldwide. We live in a society that produces waste materials in enormous volumes and which has a shortage of housing. If we can find a way to transform waste material into usable building materials, we are already one step closer to solve our waste management. The future for the self-build movement is to move from the use of natural material such as wood to those made from recycled materials such as rubber tires, aluminium cans, and recycled plastics.



Figure 14. Large housing development, in Lewisham, inspired by Walter Segal's self-build movement.

regenerated An example of environmental social and awareness in architecture is the work of South London based Community Land Trust called the Rural Urban Synthesis Society (RUSS), founded by Kareem Dayes, in 2009. Growing up on Walters Way himself, his father being one of the self-builders, Dayes shares Segal's sentiment for community architecture and his work is the core inspiration for

RUSS's self-build housing projects. Their aim is to create sustainable communities by offering affordable homes across all London, increase food security and encourage biodiversity²⁵.

Their first large self-built housing development at Church Grove, in collaboration with Jon Broome Architects, promises to create self-sufficient neighbourhoods, where the residents are in control of their living environment, design principles inspired by Segal's ethos. The proposal embodies Segal's self-built mentality but on a larger scale, consisting of 36 permanent

²⁵ "Construction Begins: London's Largest Self-Build Community Housing Project", *Rural Urban Synthesis Society*, 2022 < https://www.theruss.org/2021/09/22/construction-begins-on-londons-largest-self-build-community-housing-project/> [accessed 23 December 2021].

affordable homes in varying sizes and layouts. The scheme also includes food-growing and gardening communal spaces, shared cars and laundry and a central playground. This high-quality and low-cost housing scheme will be available for people looking for affordable housing in London, and unlike the half million pounds self-built houses on Walters Way and Segal Close, it promises future affordability with no developer profit. Alongside their self-built community projects, RUSS founded a School of Community-led Housing, in Lewisham, for sharing their experience and knowledge in self-built and community architecture. The interactive workshops and online talks that they hold are available to individuals and community groups interested in community-led housing.

CONCLUSION

Ultimately, what is so powerful and everlasting about Walter Segal's self-built method is the idea of choice. Through his contribution in the self-built movement, he showed us that, regardless of one's lack of experience or knowledge in the building design, we can take control over our living environment. Whether we want to free ourselves from the constraints of the current political and economic control or stay in this system and hope for a change, the choice is ours:



"This whole experience has taught me personally an awful lot about human beings, and it has taught me an awful lot about their abilities - ... and where people can discover in themselves all kinds of talents which in their former lives, they had absolutely no opportunity to use."²⁶

The self-built movement that he started empowered communities like those of Walters Way and RUSS, to create a housing quality that is both satisfying and ethical through cooperative work and using readily available natural resources and materials.

Segal inspired projects show evident improvement and adaptability of the self-build method to our contemporary standards of sustainable construction. Unlike the first self-build housing schemes in Lewisham, future projects will be built in collaboration with a construction company, but the residents will still have the opportunity to get involved in the building process, together with local apprentices and volunteers. This continues Segal's self-build legacy through empowering individuals by offering them the opportunity to take control over their living environment and forming communities through cooperative work and shared support.

In the end, could the self-build movement inspire a collective shift in our attitudes towards the way we build our homes? These case studies may help us to understand the necessity of rethinking housing schemes with adaptability in mind and incorporate sustainable construction methods into self-built designs that are both affordable and innovative.

²⁶ Taran Wilkhu and Alice Grahame, Celebrating Segal: Walters Way & Segal Close (London, 2016), 14.

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Fig. 2 – Grahame, A. and Wilkhu, T., 2016. Walters Way and Segal Close. 1st ed. London: Forest Hill Press, p.5.

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Fig. 13 – Khan, Hasan-Uddin, Charles Correa, and Sherban Cantacuzino, Charles Correa : Architect In India / Hasan-Uddin Khan ; With Essays By Sherban Cantacuzino And Charles Correa (London, 1987), 72

Fig. 14 – Shepheard Epstein Hunter, Church Grove: Artist Impression From Within The Eastern Courtyard Looking West, 2022 https://www.theruss.org/2021/09/22/construction-begins-on-londons-largest-self-build-community-housing-project/ [accessed 16 December 2021]

Fig. 15 – Richardson, Brian, and Jon Broome, The Self-Build Book, 2nd edn (1991), 51.