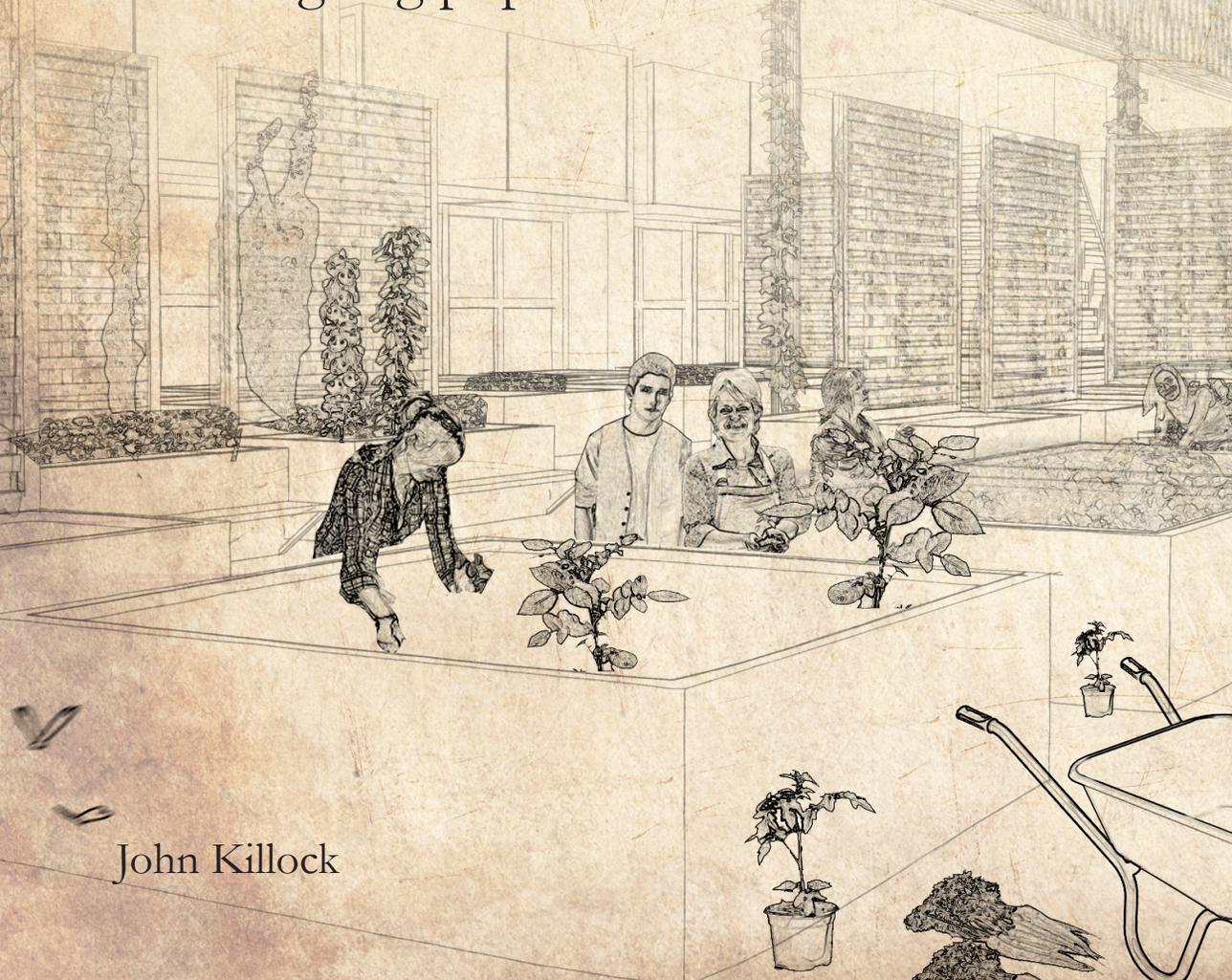


# Is cohousing a suitable housing typology for an ageing population within the UK?



John Killock



# Abstract

The population of older people within the United Kingdom is rising rapidly. An economic depression, housing crisis and increasingly top heavy population pyramid are due to create significant problems in the near future unless these problems are tackled and planned for now.

There are a very small number of cohousing communities in the UK. Such schemes offer a supportive environment as well as a number of other benefits which can be particularly beneficial for older people as has been demonstrated in Europe and the United States. Despite this there are no cohousing projects specifically for older people within the UK.

It is apparent there is little UK academic research in this area and key questions remain unanswered - why has cohousing not taken off in the UK to the same extent in other parts of Europe? Has it been tested? Is it a suitable and realistic new typology for older people in the UK?

This study aims to investigate these questions from a number of perspectives including: the science of ageing both mentally and physically; how elderly people have been accommodated, cared for and treated in the past; the current accommodation options available to older people within the UK; UK housing culture and its influence on the design and procurement of housing; and a field investigation of existing cohousing projects in the UK, The Netherlands, Denmark, Sweden and the US.

Conclusions are then drawn on the suitability of cohousing as part of a solution to housing an ageing older population within the context of the UK.

© February 2014, John Killock.

A hardcopy of this publication is available at the RIBA Library.

The publication is also available as a download at [www.architecture.com](http://www.architecture.com).

If viewing this publication electronically it is best viewed as a double spread.



John Killock has a background in architecture and planning and has an interest in alternative models of housing.

He can be contacted at [john.killock@icloud.com](mailto:john.killock@icloud.com)

This publication has been produced with the support of the RIBA Boyd Auger Scholarship.

**To Margot Auger and the Royal Institute of British Architects for organising the Boyd Auger Scholarship,  
donated to the RIBA in memory of architect and civil engineer Boyd Auger.  
This research would not have been possible without the support of this travel scholarship.**

With thanks to all of the cohousing projects visited and all of the residents who made time to speak with me.  
All projects were kind hosts and I am extremely grateful.

Special thanks in particular go to:

Bas Bussink and Christine Strating of Centraal Wonen Houtwijk, Den Haag, The Netherlands  
Karel Slot of Centraal Wonen Zevenkamp, Rotterdam, The Netherlands  
Carrie Kinney, Ann Zabaldo and Harriet Epstein of Takoma Village Cohousing in Washington DC, USA  
*All of whom hosted me for a week and enabled me to experience life within a cohousing community.*

Thanks also to:

Professor David Oliver, National Clinical Director for Older People  
*for his enthusiasm and support early on in the project*

Pam Gilchrist of Sand River Cohousing, Santa Fe, New Mexico  
and Ania Rzeszutko of Stone Curves Cohousing, Tucson, Arizona  
*who kindly hosted me and drove me to other projects in the surrounding area.*

Flip Krabbendam architect of Centraal Wonen Delft  
*who hosted me in Delft and has offered great insight into the thoughts and complications  
involved in developing the early Centraal Wonen in the Netherlands.*

Anna Dijkhuis, a sociologist in Rotterdam who has worked on a number of early Centraal Wonen projects.  
*for hosting me in Rotterdam and for sharing her thoughts and observations of Centraal Wonen.*

Simon Zwart, secretary of the Landelijke Vereniging Gemeenschappelijk wonen van Ouderen (National Association of  
Communal living Elderly,) *who has assisted me considerably whilst visiting sites around the Netherlands.*

Kerstin Kärnekull and Anne Demerus of Kollektivhusföreningen Färdknäppen, Stockholm, Sweden  
and Professor Dick Urban Vestbro of Kollektivhus Tullstugan, Stockholm, Sweden  
*who have made time to speak with me and provide me with their insights of cohousing around the world.*

# Contents

1. Introduction.....	4
2. Understanding ageing.....	11
3. Existing housing for older people in the UK.....	17
4. The evolution of cohousing.....	32
5. UK Housing Culture.....	48
6. Observations from the field research.....	54
7. Conclusion.....	137
8. Recommendations.....	144
9. Case Studies.....	147
References.....	184
Bibliography.....	189



# 1. Introduction

## An ageing population

It is rare that architecture covers the subject of human ageing, despite it being a part of life which most of us will eventually experience. The topic of ageing is not generally considered sexy or exciting in the field of architecture and in many cases does not receive the attention it deserves.

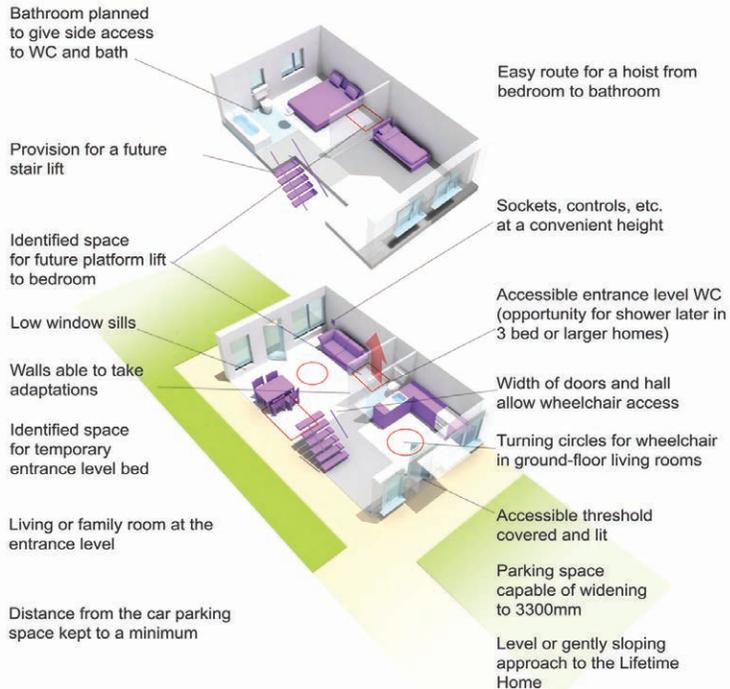
Architects are rarely challenged to do something different with housing for the elderly. They are not criticised for doing what has been done before; nor are they praised. We must challenge tradition and accepted practice. Guidelines and standards must be questioned for their appropriateness to a diversified ageing population.<sup>1</sup>

To most designers in the Western world, consideration of old age is focussed on design parameters regarding wheelchair dimensions and the location of hand grips. This adds to society's perception that the old are frail, weak and in need of care [1.1]. New standards in architecture such as *Lifetime Homes* are taking a more holistic approach, but this generally takes the form of physical design guidance which bears little relation to existing psychological and social implications of ageing [1.2]. *The National Strategy for Housing an Ageing Society*

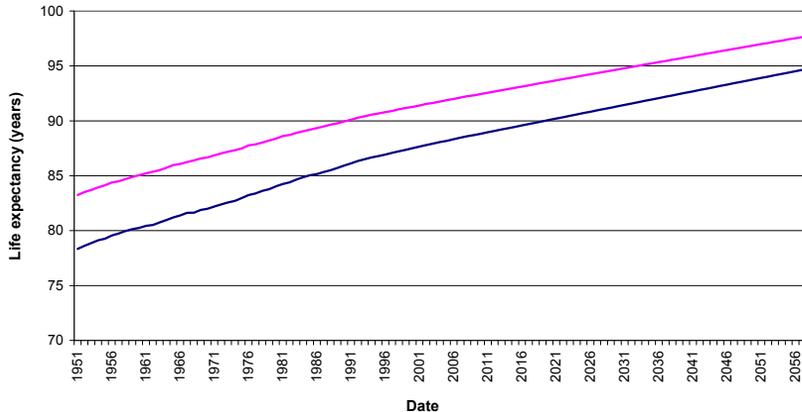
<sup>1</sup> Hoglund, J. D. (1985) *Housing for the elderly: privacy and independence in environments for the aging* New York; Wokingham: Van Nostrand Reinhold p.2

1.1 Road sign indicating elderly crossing point  
*Reinforcing cultural perceptions that the elderly are old, frail and weak.*

## Lifetime Homes Diagram



1.2 Lifetime Homes design criteria  
*Planning for ageing, but mainly on a technical level.*



1.3 UK Life Expectancy at Birth 1951-2058 (projected)

*More and more people will live longer than a century. (Source: Office for National Statistics)*

*Dark blue: Male. Light blue: Female.*

set out in *Lifetime Homes, Lifetime Neighbourhoods*<sup>2</sup> begins to recognise the importance of social links, community and the importance of life beyond the house. The *HAPPI Report*<sup>3</sup> was commissioned by the *Homes and Communities Agency* as a response to both the alarming future population projections for the over 60 demographic group which is projected to increase by 7 million over the next 25 years<sup>4</sup> and the impending housing crisis<sup>5</sup>.

It is perhaps too easy to forget that we all age, and nearly all of us, at some point, will be part of the older demographic in society. In fact, there have never been as many older adults in industrialised

countries as there are now. The numbers of older adults have increased dramatically during the 20th century as a result of better health care, a better quality of life and the lowering of women's mortality during childbirth<sup>6</sup>.

Average life expectancy is set to continue to grow with ongoing developments in medical science. Over one-third of the UK population is now over 50, but this is predicted to increase to almost half of the UK population by 2030 [1.3]. This change in balance between young and old will have a significant impact on our society and presents a ticking time bomb unless we develop economically, socially and sustainable solutions of housing in the immediate future. Carrying on with a traditional paternalistic approach to housing older adults is no longer a viable or suitable.

<sup>2</sup> DCLG, DoH, DWP (2008) *Lifetime Homes, Lifetime Neighbourhoods: A national strategy for housing an ageing society* London: DCLG

<sup>3</sup> Homes and Communities Agency (2009) *HAPPI Report: Housing Our Ageing Population: Panel for Innovation* London: Homes and Communities Agency

<sup>4</sup> Office for National Statistics (2011) 'Topic Guide to Older People'

<sup>5</sup> Griffith M. (2011) *We Must Fix It, Delivering Reform of the Building Sector to Meet the UK's Housing and Economic Challenges* London: Institute for Public Policy Research IPPR

<sup>6</sup> Office for National Statistics (2011)

It is also important to question what we define as *elderly* or *old*. Our concept of what makes someone an old person or elderly is dependent on different factors. It is clear that our perception of old age has changed considerably in the last 150 years. According to some records, in 1875, old age was considered any age after 50 in Britain<sup>7</sup>, but today the concept of old age varies considerably. One study suggests old age starts after 59<sup>8</sup>, another suggests 69<sup>9</sup>. Our assumption of how old is 'old' is also influenced by our own age. A single survey of 2,200 people revealed that on average those under 25 consider old age to be 54 whereas those over 80 consider it to start at 68.

7 Rocbuck J. *When does old age begin?: The evolution of the English definition.*

Journal of Social History. 1979;12(3) pp. 416-28.

8 *Old age starts at 54 (and youth ends at 32) - that's if you ask young people* Daily Mail 13 January 2012.

9 *Middle age begins at 55 years, survey suggests* BBC News 18 September 2012

We must recognise that the third age is now a significant part of our life - in some cases lasting 40 or more years.

This requires us to subdivide old age into smaller demographic groups. There are variations on what these subcategories are, but generally speaking these consist of the *young old* aged 60 to 69, the *middle old* aged 70 to 79, and the *very old* aged over 80 years of age<sup>10</sup>.

Despite such significant chronological extensions to human life expectancy and radical social changes in the UK, our society still retains a surprisingly negative perception towards old age. A generation gap between youth culture and the older generations has maintained damaging stereotypes such as that the older demographic is a demanding drain on

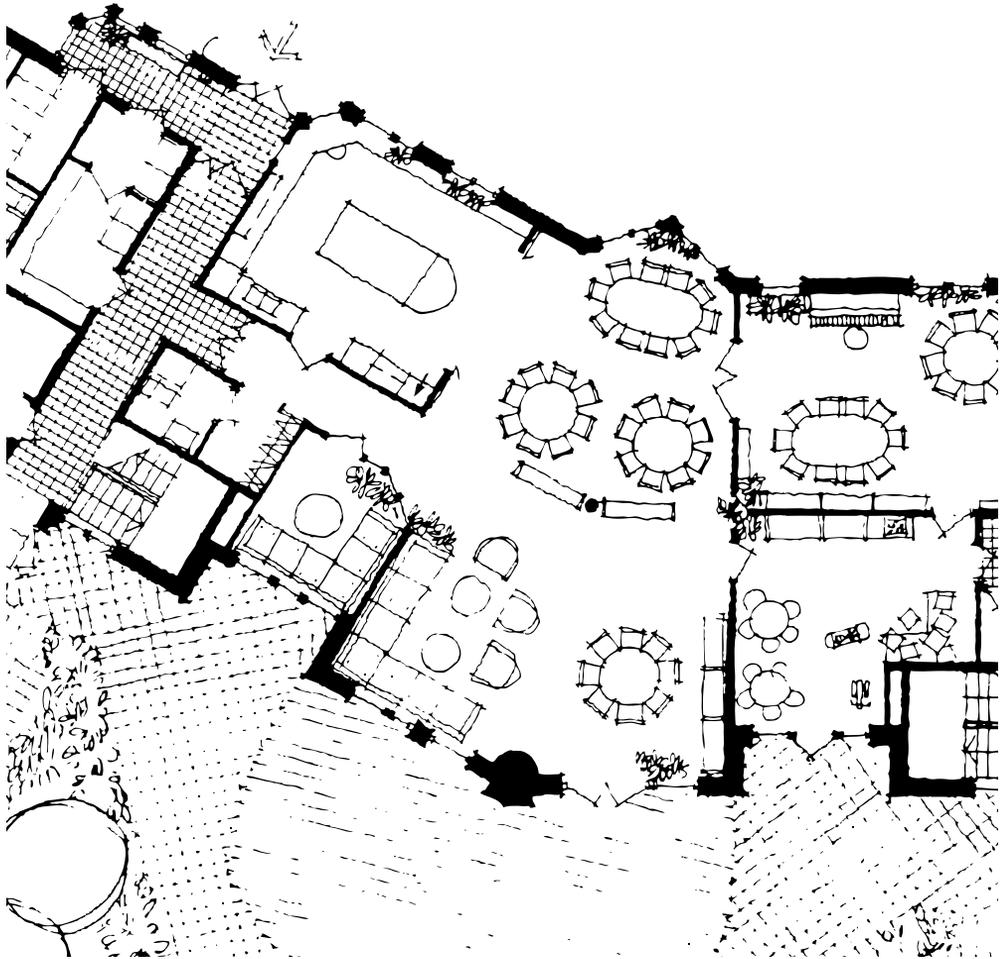
10 Forman DE et al. "PTCA in the Elderly: the 'young-old' versus the 'old-old'" J American Geriatric Society. 1992 Jan;40(1):19-22.



#### 1.4 Generation Gap

*Is there an increasing generation divide in UK society?*

*Image: D. Winship*



1.5 Rainbow cohousing scheme, Sweden (Completed 1989)  
*Indicating the common areas shared and managed by all residents.*

society<sup>11</sup> [1.4]. Instead we are due for a culture shift where ageing is seen positively as an active, productive and fulfilling stage of life.

Older people will make up 48% of the increase in new households by 2026 and this is recognised as a significant market share by private developers<sup>12</sup>. This demographic also has the most significant proportion of equity in property, yet many people live in oversized or unsuitable housing. Providing attractive accommodation models is therefore also a key way to unlock equity in the housing market, free up family housing and help fuel the construction housing sector.

Housing development in the UK is often considered conservative and slow to respond to the evolving demands of this new third generation<sup>13</sup>. This calls for innovation in consultation, procurement and design of new housing to ensure we do not miss this opportunity to build suitable housing for the future; housing which is not just well designed, but considers the wider social interactions and opportunities of the surrounding neighbourhood.

## Cohousing

This study focuses on *cohousing* - a housing concept which although still not common throughout the world has continued to gain attention from individuals, families, housing associations, sociologists and architects over the last four decades.

Cohousing is a way of life that offers people privacy, independence and their own private residence within a group of residences. Individual projects vary, but in all cases residents share some common

space which is organised and managed by the group itself [1.5]. It is a means of staying socially active, sharing interests and offering mutual support. Cooking and dining is also an activity which is usually shared varying from one common meal five evenings a week, to a meal every one or two weeks. These activities are seen as a key part of bringing the community together. However there is complete flexibility with how much engagement a resident wishes to have. A resident is not expected to attend every event, nor eat at every meal and can have as much social interaction, or privacy as they desire.

Cohousing can be multigenerational, where older people and families live as part of the same housing development, or it can be for adults who prefer to live in child-free environments. The US has coined the term for this type of housing as *senior cohousing* and this type of development is usually for adults over the age of 50 although individual communities have different restrictions.

Cohousing has become a popular option within modern society because it allows residents to maintain as high a level of privacy and independence as may be desired, but provides many opportunities for residents to interact.

The last century has witnessed significant social and economic changes. In the UK, even in the last fifty years, we have witnessed a significant decline in the number of nuclear families<sup>14</sup>. Modern technology and innovations in transport offer a far wider range of opportunities for adults of all ages and as a result it is less common for younger people to remain in the locality of the family unit. Instead young adults are often encouraged to travel for further opportunities. Such mobility has led to a reduction in the traditional 'close communities' we once would

11 *Generation gap 'could undermine society'* The Observer 21 September 2008

12 DCLG (2008) *Lifetime Homes, Lifetime Neighbourhoods* p.7

13 CABE (2003) *The Value of Housing Design and Layout* Torbridge: Thomas Telford p.3

14 Richardson, R. (2010) 'Nuclear family 'in decline', figures show' BBC News 2 July 2010

have experienced<sup>15</sup>. Cohousing is a neighbourhood in which neighbours know each other in a similar way to the notion of a traditional village but in a modern context. It has benefits for childcare, which makes it popular for families, and provides a socially supportive environment which makes it popular for older residents.

Despite the popularity of cohousing in some parts of Europe and more recently the US, cohousing has yet to become an established housing model in the UK which only has 15 registered multigenerational cohousing groups. These projects vary considerably in their size, demographic makeup and building layout. Only three are new purpose built developments.

The UK currently has no senior cohousing projects, although one group in London now has approved planning permission after a number of setbacks. This development will be the UK's first senior cohousing community and is expected to act as a precedent for future projects.

Of these existing projects only four have been completely purpose designed and built. The remaining projects have made use of existing buildings by retrofitting facilities and adapting the buildings as required. Many of these existing building conversions have worked well but there is considerable scope for the architectural design to play a part in future developments. In many projects within Europe and the US, the architect has played an important role and had varying success in conveying the aims and ambitions of the cohousing community. In such cases many new skills are required in consultation and project management.

The architect has the potential to bring real value to a cohousing community but this raises questions.

Why is cohousing suited to older people? What are the alternative models of living for older people? Why is it that cohousing has not been as popular in the UK as in Europe and the US? How successful have both senior and multigenerational projects been in other countries? Are there cultural differences between countries? Does the design of a project make a difference to the community and what lessons can be learned from abroad?

## Methodology

1. An initial exploration of the key psychological theory relating to human ageing and the built environment.
  - An exploration of alternative models of living for older people
  - A field study of both senior and multigenerational cohousing projects in the UK, The Netherlands, Denmark, Sweden and the US which will inform:
  - The evolution of cohousing and why has cohousing been slow to develop in the UK?
2. Differences between different cultures
3. Different models of cohousing
4. Observations of the various projects
5. Conclusions
6. Recommendations
7. Case studies of examples to highlight lessons learned

---

<sup>15</sup> Griffin, J. (2010) *The Lonely Society* Mental Health Foundation: London

## 2. Understanding ageing

The study of ageing has advanced significantly over the last century, but it is not an area of science to which architects and designers are often exposed [2.1]. In order to gain an understanding of the suitability of cohousing as a typology of housing for our ageing population, it is first necessary to understand the key theories of ageing. Understanding what happens to us as we age both physically and psychologically will help to determine the potential for cohousing to provide a suitable model housing option.



2.1 Front cover of the RIBA Journal (July/August 2011) and Volume #27 (April 2011)  
*Increasing awareness of the issues associated with ageing in the field of architecture*

### What is our understanding of age?

Ageing is often viewed from two related perspectives: *geriatrics* the study of the biological process and *gerontology* the study of the social passage that occurs over time.

Age in humans can be measured in different ways. *Chronological age* is the measurement of ageing in relation to chronological time such as days, months and years. This is often the most common measurement of age in Western culture indicated by an annual birthday.

We also have a *biological age*. This is the maximum number of years a person can possibly live and is determined by our physical health. Our biological age is often determined by the physical state of our body and this may be influenced by our level of exercise, or a degenerative disease or illness [2.2]. It is known that our bodies will physically require more care as we age and we are likely to require more assistance from other people, whether they are friends, family or carers.

Cohousing is not a replacement for care services or dedicated care, but it is considered to be a supportive environment. Neighbours and friends may from time to time provide in-kind care or light care for a temporary period of time. An example of this would be if a neighbour collected medication or helped with shopping for another resident who was temporarily incapacitated. This exchange of favours





2.4 'Banana George' water skiing at the age of 90  
*Many old people do not feel they should have to act old because of what are to be considered social norms.*

one might live<sup>2</sup>. For example, if one were to live in housing where a group of older residents regularly arrange activities normally considered for younger adults, then it is likely that the perceived age of that person may become lower than it was previously.

The work groups and interactions between residents in a cohousing group generally mean that residents have more influence on one another than in a housing development which could not facilitate such interactions. Theoretically this could work both ways - a community could just as easily cause some resident's perceived age to become older than younger. It is however more often than not that senior residents in both multigenerational and senior cohousing communities are often active, engaged, busy productive people. It is therefore more likely that this reinforces positive attitudes towards

ageing and breaks down traditional stereotypes. Multigenerational cohousing in particular allows a high level of inter-generational interaction which may also reduce one's perceived age. This is not to suggest that senior cohousing lacks inter-generational interaction. A peer community with an age range from 40 to 100 years will host a number of different generations.

Our *psychological age* is the functional level of the psychological abilities people use to adapt to changing environmental demands. This can vary depending on a number of factors based on the life experience of a person<sup>3</sup>. This is something which may not be directly linked to architecture, although it could be suggested that being in an environment of activity and social interaction allows members of a community to share skills and learn from one another more than if isolated in typical housing.

Finally there is *sociocultural age*. This refers to the specific set of roles individuals adopt in relation to other members of the society and culture to which they belong. Many of the most damaging stereotypes about ageing are based on fallacious assumptions about sociocultural age<sup>4</sup>. Living as part of a community where there is a varied sociocultural view on age, or a community which does not govern activities by age could help to lower the sociocultural age. In the UK the retirement age is often seen as an influence on sociocultural age, although part-time working and longer life spans are blurring the boundaries.

Residents placed in an institutionalised setting such as a care home, where they are surrounded by people who are *cared for*, may feel older than residents in a scenario in which they live independent lives and have full empowerment of their residential setting. It is important to note that Western culture in many

2 Blanchard-Fields & Cavanaugh, J (2006) *Adult Development and Aging* New York: Thomas Higher Education p.156

3 Ibid  
4 Ibid

cases has very different sociocultural age values compared to other areas of the world. For example some tribal cultures may require older members of the community to continue to undertake many of the same roles as the younger adults.

The number of different ways to measure age show that ageing is more complex than one might expect. It also demonstrates that our concept of *old* can change from one moment to the next, and it would seem there is some truth in the saying *You are only as old as you feel*.

In terms of architecture it can be considered that we age in a number of different ways which can affect both our body and mind. This is why it is advantageous to live in a supportive environment both physically and socially in any housing project designed to be inclusive to older residents. We can also conclude that people age differently, and subsequently the third generation (residents of age 50 to 80) are likely to require some form of self-administered care. It is the transition between the third generation and the fourth generation, sometimes considered as *the decline*, which is likely to require a significant increase in the demands of supportive care, or a visiting professional.

It is also evident that our social surroundings have the potential to influence some of our other forms of ageing. This indicates the importance of a stimulating, social environment - something offered by cohousing. Residents can naturally suggest, manage and be involved in activities they want to do. Many larger institutionalised settings may also offer a range of activities but in many cases this will be by the management rather than the residents. Although individual organisations offer different systems and activities, these have a reputation for being paternalistic.

## Psychological theory and human ageing

There are a number of different theories relating to the way in which we age depending on our personal circumstances. For the purposes of understanding how we age, the key psychological theories will be briefly explored and compared with the principles of cohousing.

*Disengagement Theory* claims that as people age they withdraw from social roles and interpersonal relationships. This is enhanced by the concept of retirement and social expectations of the retired. Older adults can experience a declining control over their lives and may begin to see themselves as less than what they are<sup>5</sup>. With each withdrawal it is easy for the individual to become inward-turning and as a person ages, there is a tendency to psychologically and socially withdraw or disengage from the environment. Withdrawal, worsened by isolation, is a situation many older people face. With longer life spans, it is becoming increasingly common for older members of society to live a portion of their life alone, often following the death of a partner. Many older people express a wish to stay in their existing residence even if unsuitable or alone<sup>6</sup> [2.5].

The existing built environment can require residents to make significant effort to engage in social activity beyond the telephone or home computer. If the physical environment is designed to encourage interaction and there is a local support system there is potential to reduce the dangers of withdrawal. Cohousing is ideal as there is a mixture between independence and social participation. A support network of neighbours and friends helps us to

5 Hoglund, J. D. (1985) *Housing for the elderly: privacy and independence in environments for the aging* p.5

6 Griffin, J. & McKenna, K. (1998) 'Influences on leisure and life satisfaction of elderly people', *Physical & Occupational Therapy in Geriatrics*, 15(4)



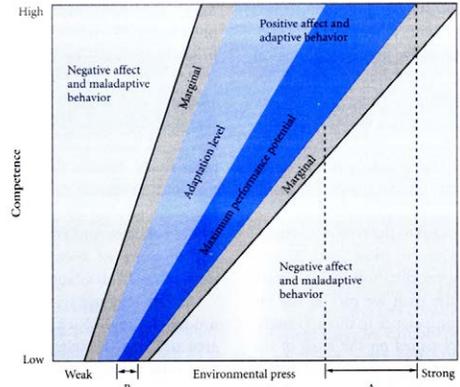
2.5 Isolated resident  
Adaptations can be made to existing properties, but how supportive is the locality?

overcome life's challenges and to keep a broader perspective on life when children have moved or people close to us are infirm or deceased.

*Activity Theory* suggests that because of a positive relationship between activity levels and life satisfaction, older adults tend to replace lost roles and activities with new roles to maintain activity levels<sup>7</sup>. Cohousing helps to maintain a high level of activity with various committee groups, work groups and group activities. Many cohousing residents remain highly productive into old age and may also work part-time, or have involvement in voluntary groups.

*Continuity Theory* states that with advanced age we develop a stronger need to maintain our habits and routines, but that we still adapt to changing physiological capabilities, new situations, and

7 Ibid



2.6 Environmental Press and Competency Theory  
This figure indicates that a person of high competence will show maximum performance over a larger range of environmental conditions than will a less competent person. Image: Blanchard-Fields & Cavanaugh, J. (2006)

life's experiences<sup>8</sup>. Sharing common space and experiences with others helps us to change and adapt to new situations because the environment is supportive. Living in a cohousing scheme also requires a level of tolerance so participants may be less likely to develop such strong personal habits and routines. This could also mean however that older people who move into a cohousing project may have less tolerance than younger adults and find the transition from a typical living environment more difficult.

*Environmental Press and Competency Theory* shows that the elderly can adapt to changes but at different levels. If the environment is not stimulating it has a negative effect and if the environment is overstimulating the elderly person cannot adapt or *maladapts*<sup>9</sup> [2.6]. Examples of this are where the social pressure is too

8 Blanchard-Fields & Cavanaugh, J (2006) *Adult Development and Aging* p.186  
9 Ibid p.187

high for the situation, or a modern concept is forced upon the elderly person in a short space of time. The complete freedom to choose as much or as little social interaction in a cohousing project as he or she wants allows a resident to mediate their own level of environmental stimulation, thus helping to avoid maladaptation. However, there is also an argument that people wishing to live in a different type of accommodation into old age should plan to do so before it is too late as it may become more difficult to adapt to the new environment.

There is also the term *roles*. Roles are culturally determined guidelines and expectancies in terms of the behaviours, traits, and characteristics expected of individuals who occupy a specific social position in society<sup>10</sup>. During the course of adulthood each of us will develop and modify a variety of complex roles that we will occupy for varying lengths of time. Roles give meaning, organisation and structure to our lives, and the loss or change in our roles can lead to anxiety, tension, and emotional distress. With increased age, important, well-defined roles such as work or childcare are often lost and replaced with less well-defined ones. This has important implications for the social status, and attitudes towards older people. Specifically, this contributes to the perception of late adulthood as a role-less period of life<sup>11</sup>. This, however, does not have to be the case - while roles in life inevitably change and some more important ones are lost, the multitude of tasks required from those living in a cohousing setting help to smooth transition between roles and offer possibilities for new roles.

Many of these theories are linked to the changes we experience over our life, particularly as we grow

into old age. It is suggested that negative effects are caused when we experience sudden changes to our circumstances and do not know how to cope with such changes. This can be a sudden change, or a gradual change. Both geriatrics and gerontology demonstrate that ageing is strongly influenced by our social and physical surrounding which this reinforces the importance of being involved in a supportive, active, social community [Fig 2.7]. Despite this, in the fastest growing age-group of 75 years and over, at least 50% now live alone and 1.2 million older people (13%) in the UK always or often feel lonely<sup>12</sup>.

<sup>12</sup> Help the Aged (2008) *Spotlight Report 2008: Spotlight on older people in the UK* p.13 London: Help the Aged

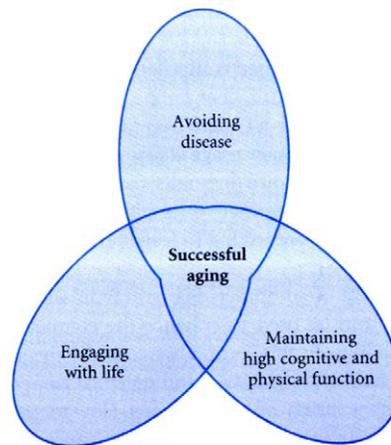


Figure 2.7: Successful Ageing  
*The three means to 'successful ageing'.*  
 Image: Blanchard-Fields & Cavanaugh, J. (2006)

<sup>10</sup> Hagestad, G & Neugarten, B (1985) 'Age and the life course' in R. Binstock & E. Shanas (Eds.) *Handbook of aging and the social sciences* pp.35-61. New York: Van Nostrand Reinhold

<sup>11</sup> Rowsow, J. (1985) 'Status and role change through the life cycle' in R. Binstock & E. Shanas (Eds.) *Handbook of aging and the social sciences* p.693 New York: Academic Press

### 3. Existing housing for older people in the UK

Now that we have an understanding of what happens to us as we age and the social and physical needs ageing may present we need to look at the current housing options available to older people within the UK and how such options differ from cohousing. It is first necessary to explore the history of housing the elderly to identify how this may have later influenced the current housing options available in the UK.

#### Housing the elderly within the UK in the past

Housing options and care for older people have improved significantly over the last century and people are living longer. In 1915, 63% of people died before the age of 60, whereas in 1999 only 12% died before the age of 60<sup>1</sup>. In the past, the concept of retirement would not have existed for many people as they became older. Those who could no longer work due to physical or mental capacity would usually be cared for their family unit often consisting of three or four generations. Older relatives could still be productive by assisting with housework tasks such as cooking, cleaning and washing - all of which would previously have been considerably more labour-intensive than they are today. Older relatives could also provide important assistance with child care particularly in the working class. Today, the financial value of such roles is

recognised in economics as the *family economic unit* but it is difficult to place a fiscal value on these responsibilities<sup>2</sup>.

A limited number of elderly may have had some form of assistance from monasteries and almshouses. Some monasteries would provide basic care for a small number of the old and infirm. This would include the provision of food for some elderly, and even accommodation in the form of almshouses but this would only be reserved for those elderly meeting certain criteria and those most desperately in need<sup>3</sup> [3.1].

<sup>2</sup> Grandparents Plus (2009) *Rethinking Family Life: exploring the role of grandparents and the wider family* London: Grandparents Plus

<sup>3</sup> Fraser, D (2002) *The Evolution of the British Welfare State* 3rd Revised edition London: Palgrave Macmillan



Figure 3.1: Monastery Alms  
*An alms providing food to the elderly and poor.*

<sup>1</sup> Allen, G. & Hicks, J. (1999) *A Century of Change: Trends in statistics since 1900* Research Paper 99/111 Social and General Statistics Section London: House of Commons Library



The *Dissolution of the Monasteries Act* in 1536, severely disrupted the care religious beneficiaries could provide. Later the passing of the *Act for the Relief of the Poor* in 1604 made parishes legally responsible for looking after their own poor. Initially this led to a poor rate tax from local property owners resulting in *out-relief grants* of money, clothing, food, or fuel to those living in their own homes. Resources were limited, and it was not long before the workhouse concept was developed as a solution to house paupers, the unemployed, unsupported children, the ill or infirm and the elderly.

The workhouse was not designed to be pleasant and was often seen as a last resort. *Inmates* including able elderly were required to work in exchange for basic food and lodgings. In many cases people would work until death. The elderly who were unable to work, usually sat in day rooms or sick wards with little opportunity for visitors<sup>4</sup> [3.2].

The poor laws and the workhouse were influenced by Jeremy Bentham<sup>5</sup>. Bentham described how workhouses were essentially prison-like structures, designed principally to *grind rogues honest*<sup>6</sup>. Bentham's principles of prison design have been linked to a number of institutionalised facilities including those used to house the elderly<sup>7</sup> [3.3].

It was not until the 20th century that state care was introduced which has resulted in the state pension system we have today.

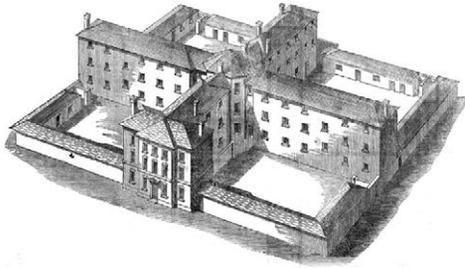
4 Higginbotham, P (2004) 'The History of the Workhouse'

5 Bentham became one of the most significant of the utilitarians and had great influence in the Poor Law Amendment Act

6 British Library (2011) 'The Workhouse'

7 Foucault, M. (1975) *Discipline and Punish: The Birth of the Prison* Harmondsworth: Penguin 1979

### 3.2 The workhouse (1907) *Elderly often 'worked until they dropped'.*



3.3: Workhouse  
*A workhouse design for 300 paupers (by Sampson Kempthorne 1835)*

A history and development of institutionalised architecture of workhouses, hospitals and care homes and the grouping of the elderly with the sick and infirm has manifested itself in our cultural attitudes toward the elderly. This is still evident today in some care homes and retirement facilities and has led to a somewhat institutionalised culture in both our architecture of accommodation for the elderly, and within UK society.

## The current situation

The number of births in the UK has declined throughout the last century, interrupted only by the post-war baby boom and a secondary peak in the 1960s<sup>8</sup>. The post-war baby boomer generation today are now over 65 which has resulted in our sharp rise in elderly of this age group. As the ratio of old to young adults changes there will be fewer

8 Allen, G & Hicks, J (1999) *A Century of Change: Trends in statistics since 1900*

younger taxpayers to contribute to the state pension system and the many other tax-based support programmes currently demanded by the older population. Essentially the existing care system is becoming top-heavy with an increasing demand for more administered care than can be provided.

There are no longer enough financial resources to provide the same level of state care services, or to cope with the existing state pension system<sup>9</sup>. This has been further worsened by the current economic climate which has reduced private pensions linked to stock indexes<sup>10</sup> and has resulted in reduced funding for many of the quangos which deal with care of the elderly<sup>11</sup>. The increasing elderly population will be affected, and the working population are likely to feel the additional squeeze of the burden of increased taxes and pension contributions.

This has led to a rethink of the current model of state care. It is now recognised that compulsory retirement ages need to change as people live longer and the state pension falls behind average earnings. Both the age at which we can retire and the age at which we will be able to collect a state pension are becoming later<sup>12</sup>.

This has caused concern about the levels of care and support the state can continue to provide. It would seem that some elements of history are repeating; people will work into older age but this is likely to be a gradual process with a variety of work options. There is also a return to multigenerational households as younger adults find it difficult to get on the housing market due to high prices and lack of supply and are continuing to live at home.

9 'Government accepts care costs cap' *The Independent* 03 July 2012 and 'Elderly 'robbed of dignity' by falling social care services' *The Telegraph Money* 8 January 2012

10 'Millions to see private sector pensions reduced' *The Telegraph* 8 July 2010

11 'Quango cuts: 177 bodies to be scrapped under coalition plans' *The Telegraph Sunday* 08 January 2012

12 'Britain 'to scrap retirement age' *The Guardian* 12 May 2002

In relation to architecture and housing options for older adults in the UK this change of circumstances is significant. Our concept of retirement is changing as are our cultural expectations of life beyond 50. This demands further research into the way we design housing and neighbourhoods to be flexible, adaptable, affordable and socially supportive places in which to live.

## Current options

The options indicated below are not entirely comprehensive as there are a number of variations of housing types. This section aims to highlight the main housing options available to older people within the UK. The government has a number of different classifications of housing provision [3.4]. The HAPPI Report<sup>13</sup> also provides an overview of the range of housing options available to older people in the UK [3.5].

### Stay in Place

The most common approach for older people is to continue living in their existing house which is advantageous if this will allow access to existing social groups. Residents often find this option easier as they will be used to living in the property and may have sentimental value attached to many aspects of a house and the locality. The UK government has a number of options to help people stay in their existing house, including the provision of visiting carers; grants for repairs and adaptations and assistance with bills and home deliveries.

A common problem with this option is that the

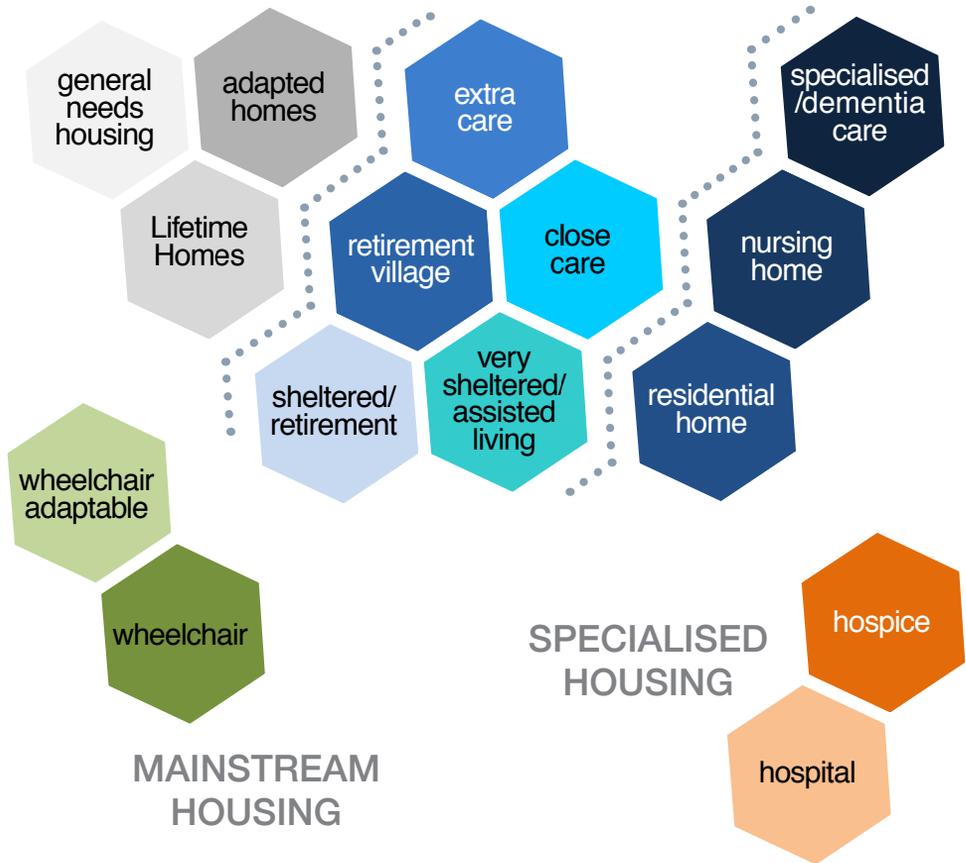
existing property is often unsuitable for an ageing couple or individual. It may be that the property was once the family home, in which case it may be too large for a couple, or single person [3.6]. The property may be unsuitable in terms of its physical layout, for example stairs may be difficult for the residents or parts of the property may be difficult to adapt in order to make the home more accessible. The existing home may also be in an unsuitable location, away from social links or a community centre.

- Level 1:** non-specialised and non-adapted dwellings ('staying put' or living with relatives)
- Level 2:** independent dwellings which have been purpose-built or adapted for fit and active elderly who may need some support but can generally look after themselves
- Level 3:** purpose-built, self-contained dwellings (to mobility standards) in groups with warden attendance and minimal communal facilities, for active elderly (corresponds to 'Category I')
- Level 4:** purpose-built, self-contained dwellings (to full mobility and wheelchair standards) in groups with warden attendance and access to communal facilities, for physically frail elderly (corresponds to 'Category II')
- Level 5:** similar to Level 4 but with extra care support available and the option to take communal meals, sometimes referred to as Category 2.5
- Level 6:** residential care homes for elderly who may be mentally and physically frail and need of constant personal care
- Level 7:** nursing homes for elderly who are sick or very frail and need qualified nursing care

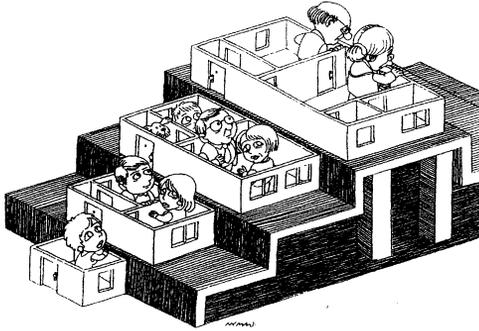
3.4 Levels of housing care for the elderly

Source: Robson, D. (1998) based on *Help the Aged (HLA) 1986*

<sup>13</sup> Homes and Communities Agency (2009) *HAPPI Report: Housing Our Ageing Population: Panel for Innovation* London: Homes and Communities Agency



3.5 Housing options available to older people within the UK  
 Source: FLAPPI Report (2009)



3.6 Household size and age  
*Many older people live in houses larger than they require and which may not be suitable. Image: Nyman, (from Durrett, C. 2009)*



3.7 Homeshare  
*Allows older people to stay in place, with the help of a student or young professional. In exchange for 'light care' the young adults can live in the house of the older person rent free.*

## Homeshare (Variation of Stay in Place)

A number of non-profit organisations provide students, young professionals or key workers with free lodgings provided by an elderly person in exchange for basic care and support. This is proving a popular option with excellent benefits for both parties<sup>1</sup>. It utilises space in properties that are often larger than the occupant requires, and builds on the *in-kind* notion of care which saves the state money and helps younger adults who may not have much money. It provides an opportunity for the older resident to have some continuity with their voluntary aide and is also seen as a good means for intergenerational interaction<sup>2</sup> [3.7].

In the Netherlands such an arrangement is called a *kangaroo house* and has raised questions as to whether the architectural design of houses can better facilitate such an arrangement if a purpose-built project were developed. The disadvantage is that, depending on the design and layout of the house, in some cases there is a lack of privacy between the older and younger adult. If this was considered at the design stage of some housing projects, this relationship could be better facilitated.

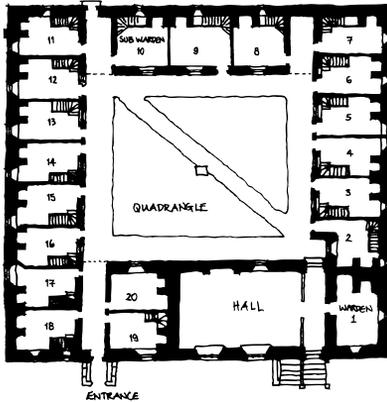
## Almshouses

Almshouses are another option, but these are in short supply and are often restricted to particular applicants in accordance with the original benefactor's wishes, and are therefore not an option for many older people<sup>3</sup>. Although many almshouses complexes are old, the quality of construction is often relatively high and many have been modernised and adapted. It is interesting to note that the layout and planning of almshouses

1 Coffey, J. (2009) 'Homeshare Evaluation: Time of your life?' World Homeshare Congress, Paris, 3-5 July 2009

2 This is explored further in the following chapter

3 Bookbinder, D. (1991) *Housing options for older people* London: Age Concern England p.15



3.8 A plan of a typical almshouse  
*Almshouses are often formed around a quadrangle with a communal garden.*



3.9: Fosters Almshouses at Christmas Steps, Bristol, UK  
*Note the quadrangular form, and gate to separate the communal garden from the urban street.*

usually follows a similar pattern, consisting of a number of small units formed around an enclosed, or partially enclosed, garden often in the form of a full or partial quadrangle [Fig 3.8, 3.9]. The age of many of these older developments means they are liable to be centrally located in an urban area. Almshouses are often considered successful because they provide a good location, and a layout which encourages a social and supportive environment such as a central communal garden and a common room. The main problem with almshouses is that there are simply not very many of them, and they are often unsustainable without the support of a benefactor, sponsor, or state support<sup>4</sup>. Another problem is that many Almshouses are being sold off into private ownership because the central location fetches a high price. This revenue is sometimes used to fund new developments, but these are often on the outskirts of urban areas where the land is cheaper and the location less connected with the central area.

## Living with a younger family member

Living with a younger family member is rarely an option, although multigenerational households are becoming increasingly popular once again. High prices in the UK housing market, are resulting in more children staying at home for a longer duration or returning to live at home following university.

For older relatives this is less common unless it is purely out of necessity. An adult child is usually unwilling to live with an older relative and the elderly relative may feel they will have reduced independence and not want to be a burden, or it may be because of the lack of physical space<sup>5</sup>.

4 Ibid  
 5 Ibid



3.10 Example of a self contained granny annex garden development  
*This example would only be possible for those who have enough garden space, and those able to obtain planning permission.*



3.11 Proposed retirement village at Witney  
*Highlighting the isolation and separation of many retirement villages from mainstream society. Image: Richmond Villages*

## Granny Annexe

A granny annexe or independent flat adjoined to the family property can be a solution, allowing the older relative to maintain independence and privacy and yet remain part of the family unit [3.10]. There are also opportunities for older relatives to help out with roles such as cooking or childcare and combined utility bills might be a means to save money. This return to a more traditional model has the benefits of independence, in-kind care and offers a level of social interaction dependent on the family arrangements and layout. Carers can still visit if needed, and the annexe retains a level of flexibility if vacant; it could be used instead as a children's playroom, home workspace or rented apartment.

The problem with this option is simply that many people do not have a large enough house or grounds to facilitate a granny annexe, or do not want to live in such close proximity to their family. Many adults would like to live close to their parents, but not adjacent to or as part of the same household.

## Retirement Villages

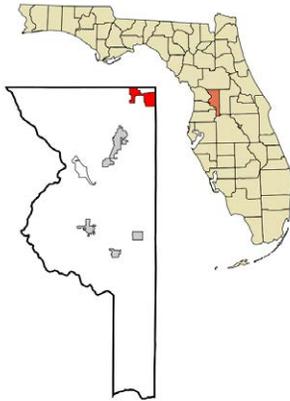
Many retirement villages enable a high level of personal privacy, yet also have a number of similar-aged people with which to socialise. The design of retirement villages can vary significantly; some of them provide many opportunities for residents to interact, others are more private [3.11].

Retirement villages are a popular option in the US, with some private projects reaching an epic scale. *The Villages*, the world's largest retirement complex with over 18,000 residents is the size of a large town and is designed for a specific US market [3.12]. This project in particular has a themed

design which has been criticised as functioning as a Disneyland for old people<sup>6</sup>. Despite this, many of the residents are happy and are socially active in the residential community. Generally retirement villages are criticised because they are an option reserved for older people with enough finance to pay the annual rates, which are often expensive<sup>7</sup>. Retirement villages are also criticised for housing a high number of elderly people together which can help to maintain a feeling of institutionalisation and separation from mainstream society. This is not helped by the location of some communities which are in self-contained gated developments in isolated areas.

6 Simpson, D. (April 2011) 'The Longevity Revolution and Other Tales of Aging' in Volume #27 Aging: Fight or Accept pp.14-16 Amsterdam: Sichtung Archis

7 Durrett, C. (2009) *Senior cohousing handbook: a community approach to independent living* p.15



3.12 The Villages, Florida, USA  
This privately run retirement themed area covers an area of Sumter County, Florida US. The population is now over 80,000. Image: Wikipedia

## Sheltered Accommodation

Sheltered accommodation, sometimes managed, sometimes privately-owned with a service charge, allows independence to be maintained and support to be provided if needed. A common arrangement for sheltered housing is in detached bungalow units but some are higher density [3.13]. Sheltered accommodation often lacks the social element and although residents are independent, they can still be isolated and alone. The model also relies on employed staff 24 hours a day.

Sheltered accommodation, as with other similar options, is declining in popularity in many areas of the UK as a result of older people's changing aspirations. Many adults do not wish to accept that they require a monitored level of care and the next generation are becoming more discerning about their housing choices<sup>8</sup>.

8 Brenton, M. (2008) *The Cohousing Approach to 'Lifetime Neighbourhoods'* p.2



3.13 Sheltered accommodation  
These separated bungalows feature 24 hour assistance when required, but do not encourage social interaction.

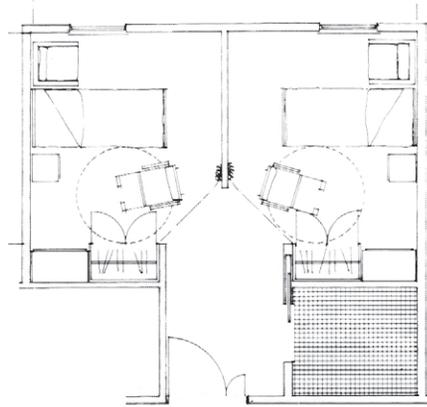


3.14 Sitting room in a supportive house  
*Allows social interaction, but only with other people of a similar age and provision of services can be quite costly.*

## Supportive Houses

Supportive houses are usually shared between seven and ten older people each having their own bed-sitting room with their own furniture. Residents come together for the main meals of the day. This allows social interaction and independence, but still has the problem of a limited range of social contact. *“Not having one’s own refrigerator, for example, means that one can no longer invite friends over for a home-cooked meal.”*<sup>9</sup> It can also be an expensive option and, as the name suggests, is primarily for older people who require a higher level of care and support [3.14].

9 Shield, R (1988). *Uneasy endings: Daily life in an American nursing home* New York: Cornell University Press



3.15 Nursing home design guidance  
*A nursing home can have plenty of structural reminders that it is an institution.*

## Nursing or Care Home

Nursing homes or care homes are usually reserved for the severely impaired elderly. These may have regulations about the extent to which residents may bring their own furnishings and other personal effects with them, resulting in an environment that has plenty of structural reminders that it is not the house of the resident [3.15]. This could be considered the most institutionalised option for an elderly person and can be very expensive<sup>10</sup>. For those elderly who require considerable support, the state will make provision for people who need this kind of accommodation, although this will only be state-funded once the personal assets of the resident have been depleted thus leaving the individual with no assets with which to support themselves or pass on.

10 ‘Cost of care in old age rises to average of £50,000’ *The Guardian* 21 March 2011

There will always be a need for care homes for those who need a very high level of care but this option should only be considered if absolutely necessary. Many care homes have a feeling of institutionalisation, although some better homes take a great deal of care in both management and design to reduce this. The problem is that all care homes are costly and the better homes, are often more expensive. It is also common for residents in this environment to become institutionalised leading to less independence and them becoming less physically and mentally active.

## Different markets

There are also some groups which are overlooked by developers. For example, there are a large number of elderly who form part of the Lesbian, Gay, Bisexual and Transgender Community (LGBT). This appears



3.16: BOOM!  
*Located near Palm Springs, California this \$250 million master-planned community is aimed at the ageing gay community.*

to be a widely unrecognised developing market. *BOOM* in the US is an experimental development in California which is currently building a large residential development specifically for seniors in this market [3.16].

It is also important to recognise the broad cultural mix in the UK. Following the establishment of a large number of foreign colonies forming the British Empire and the explorative and trading nature of the UK, many parts are now some of the most culturally mixed in the world. Many of the issues associated with a divided generation and perceptions of the elderly and housing the elderly appear to be related mainly, but not exclusively, to the White British demographic. Indian, Pakistan, Chinese and Japanese cultures are very different to the UK culture and immigrants have in many cases brought their home culture with them. In some other countries, particularly in the Netherlands this has led to the development of cohousing projects specifically designed for different cultural groups. This is something the UK will need to consider when planning housing for different groups. Cohousing communities aspire to being culturally and ethnically mixed and are generally inclusive to all races, cultures and abilities, although it is clear that most groups consist primarily of the white middle class demographic.

The UK follows a Western trend, similar to the US, where it has become a cultural right of passage to live away from your parents and it is common to pay for childcare services, and care homes. India, for example, houses collective families and as the family expands the house expands too - it is common for grandparents to care for grandchildren whilst parents are out working. Different ethnic groups therefore may have different requirements and may have less demand for alternative concepts of housing.

## What makes cohousing different?

It is apparent that there are a wide range of groups, for which there will always need to be a range of housing options, each with different variations. Some of the options above *care for* people rather than *with them*. This can be costly and exclusive to those with sufficient equity, and where public subsidies provide a somewhat more limited choice for the remainder of society, this is still likely to cost the state considerable resources. In the cohousing model residents can make their own decisions about the place in which they live and as a group have a greater level of empowerment. This provides more control to the residents, a close residential network which looks out for one another; reduced demand on private or state provided social care as a result of self administered care, and reduced costs on housing management services.

Each resident has their own private house or flat with the same facilities found in a typical apartment which is often, but not always about 10% smaller than a typical house [3.17]. This 10% reduction in space, allows for the construction of the common areas and it is expected that the common areas will mean the resident will require less private household space. The design of such projects is generally to provide a combination of both privacy in their home, and opportunities for spontaneous interaction within the community [3.18].

In a similar way to living with a relative or the granny annexe option, cohousing allows family to retain ties within the same neighbourhood and provide spaces to facilitate such interactions. There are several cohousing projects with other family members living within the same community. Cohousing also provides a broader social mix of people. This



3.17 Woonvereniging Voormekaar, Boxmeer, The Netherlands.  
*Each cohousing resident has their own private apartment or house.*



3.18 Woongroep Kwackershof, Enkhuizen, The Netherlands  
*Common spaces should provide opportunities for spontaneous interaction within the community*



3.19 Sand River Cohousing, Santa Fe, New Mexico, USA  
*Common dining takes place once a week at Sand River Cohousing.*

reduces pressure on family relationships when compared to three or even four generations living in the same household. It also allows a greater level of privacy and independence than living within the same house.

Neither type of cohousing community is a replacement for a care home or sheltered accommodation. However a closer, social neighbourhood network can allow adults to live independently for longer, before requiring such specialist accommodation. There is also the possibility that visiting carers can visit cohousing residents who are in need of extra care and there are even examples of cohousing combined with service housing in Sweden providing professional care to those who need it.

Common dining is another key feature of cohousing. This varies considerably depending on



3.20 Kollektivhusföreningen Färdknäppen, Stockholm, Sweden  
*Cooking is one of the most important group activities in cohousing. It provides an opportunity for social interaction, saves time through the economies of scale and is an opportunity to learn skills from others.*

different cohousing groups. In Sweden common dining takes place every evening during the working week, whereas in The Netherlands, UK, and US this tends to be less frequent, but normally there is a community meal at least once a week [3.19]. Cooking is usually organised in groups on a rota. Cooking in groups for a large number of people has many time efficiencies, but also makes cooking a social opportunity and an opportunity to learn new skills. You are expected to help with the cooking group when it is your turn, but depending on the size of the cohousing community this is not as often as one might expect. In some projects you are only required to cook as part of a group once every 4 to 6 weeks. In return you are able to eat on multiple occasions with no planning, cooking or cleanup required.

As a resident you are not expected to always attend common meals. In many groups a meal may often

only have around 30% of the residents present. Some residents may wish to take food and eat it privately in their residence depending on their current circumstances and many residents may have other commitments on particular evenings. In several projects cooking is a compulsory requirement for living in the cohousing community even if you do not choose to eat. This is to ensure the system works, and cooking is a key element of maintaining links within the community.

The combination of collective facilities and common dining often leads to a misinterpretation as to what is cohousing. Many people have preconceptions about cohousing. They confuse it with assumptions associated with communes. They assume that a cohousing community is based on bohemian lifestyles, temporary sexual relations and lack of privacy. Cohousing is fundamentally different to a commune in that there is no shared vision such as a spiritual belief, idealistic belief or political siding; residents have their own private self-contained house or apartment; and there are no shared finances, apart from the amount allocated to the management and upkeep of common facilities. The principal reason for the collective element is to live in a more social environment, where people know their neighbours and can manage the building together.

Individual privacy is respected, and there are subtle indicators which will signify if a resident needs privacy. These indicators vary from group to group. For example a front door may be left open if someone does not mind being interrupted, but if it is closed then they may require privacy. Similar indicators are signalled by an open or closed blind in the front window, or whether a resident chooses to sit out on the front terrace, rather than the rear, more private, terrace [3.21].

While cohousing has many benefits it is not promoted as a suitable model for everyone, and it is therefore important that there are a range of housing options available. Cohousing suits people who wish to live in a closer neighbourhood, enjoy cooking and dining with others and sharing and managing common areas together. It has particular benefits for child care as children can play together and there is less work required in preparing everyday meals. For older residents it can be a social, supportive environment with many opportunities for learning new skills and belonging as part of a group. It is important expectations are managed - it is not for people who are simply lonely or in need of help. Cohousing requires residents to put as much energy into the community as they expect in return from neighbours and friends.

3.21 Elderspirit, Bristol, Virginia, USA

*A resident enjoying some privacy in her private apartment*



## 4. The evolution of cohousing

The term *cohousing* is the most commonly used term in the English language and worldwide for this concept of housing; however it is important to recognise that there are different variations of this concept. US Architects McCamant and Durrett coined the term *cohousing* when they wrote the book *Cohousing: A Contemporary Approach to Housing Ourselves* written in 1988<sup>1</sup>. This practice introduced an adapted version of Danish *bofællesskaber* translated as *living community* into the US. The Netherlands have a concept known as *centraal wonen* translated as *central living*, which consists of both clustered living groups and is similar in design to the Danish version. There is also the Swedish *Kollektivhus* translated as *collective building*, many of which are in urban or semi-urban locations and are generally higher density developments. Each of these concepts has variations, but the similarities between them allow them all to fall under the *cohousing* umbrella.

Cohousing is a concept which has enough flexibility to work in western society. The evolution of the cohousing concept is not simple and follows a history of social developments and a long history of utopian ideas and experiments. It is a concept which has been influenced by utopian industrialist ideas, the garden city movement, the ideal home idea and feminism.

Many of the original ideas about collective living were to collectivise servants in times when domestic chores were considerably more labour-intensive than they are today. Cohousing is a later development following a time when mostly younger people

developed new perspectives on society and on personal relationships. Women began claiming fair and equal rights and, increasingly, people believed that the nuclear family, with its relatively few close contacts and single household isolated nature, provided a poor environment for raising children. This led to a range of different experiments in collective living.

Each country follows a similar theme. However the actual development of the first cohousing projects varies between different countries.

### The Netherlands

The concept of *centraal wonen* or *central living* started when in 1969 a woman, Lies van den Donk-van Dooremaal, put an advertisement in a newspaper titled *Who will design a housing project with a central kitchen with a dining room, a central laundry, a kindergarden, a room for studying, common guest rooms, and around or above this all small units with a tiny kitchen for each family*. Her article also advocated that this model of housing would free the woman from the role of a traditional housewife and allow one to enjoy a career in the same way a man could. The author had been strongly influenced by her own circumstances. She was a teacher and when she married, she did not want to give up her job to become a housewife as was common practice in the Netherlands at the time.

The journalist who interviewed her came up with the name *centraal wonen* because of the central

<sup>1</sup> McCamant, K. & Durrett, G. (1988) *Cohousing: A Contemporary Approach to Housing Ourselves USA*: Ten Speed Press

facilities suggested in her idea for this housing concept. Her advertisement was addressed to architects. No architect reacted but many people did. This was a time when the traditional nuclear family was being questioned and the commune was becoming an alternative. The concept of *centraal wonen* seemed a perfect solution which would offer both community and privacy.

In 1969 an advertisement was placed in a newspaper to attract groups interested in a housing unit with a central kitchen, dining room, laundry facilities, crèche, study area, shared guest rooms and with small units for each family: a living room, some bedrooms, a small kitchen and a shower and toilet. There was significant interest from people all over the Netherlands and this eventually led to the formation of three groups located in Hilversum, Delft and Rotterdam.

The architects carried out much research in the development of these projects. *Centraal Wonen Delft* involved an investigation set up by a sociologist and a number of precedents were visited in Denmark and Germany [4.1].

The groups noticed that in Denmark and Germany many of the projects were privately owned. However, the Dutch decided they wanted to be more democratic and also include those with less money. This meant the projects had to be realised as social housing, owned and run by a housing association. Initially housing associations were adverse to the idea as they had preconceptions about the type of community they might be accommodating. They conjured up ideas of sex orgies and anarchism and did not believe it would work. The housing associations were concerned that if the concept failed, the renters could walk away but the corporation would be left with an empty building. They remained adverse to the idea and were



4.1 Images of Farum Midtpunkt (1972)

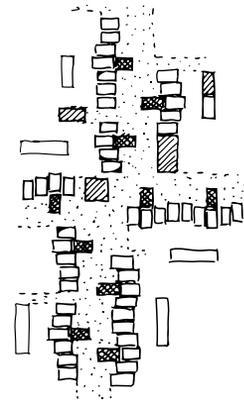
*A large housing complex in Farum, Denmark. Each housing block features private high quality private apartments and a common space on the ground floor. This was one of the early projects which inspired *Centraal Wonen Delft*.*



social housing projects constructed and owned by housing associations. The idea for seniors-initiated cohousing appeared in the eighties to meet the needs of the growing population of adults aged over 50.

The success of woongroeps in the Netherlands is partly due to good integration between local authorities and housing associations. Cohousing for this group often enjoys greater support from local governments due to the expectation that such housing sustains health and wellbeing and therefore reduces demand on health and social care services.

Local authorities in the Netherlands have offered funding to empower groups of older people and local authority liaisons to work with forming groups, assist with grants and designating sites. This support has been a key catalyst to the development and success of senior cohousing in the Netherlands.



4.3 Centraal Wonen Hilversum, Hilversum, The Netherlands  
*Common spaces for each cluster. Image: Dorit Fromm (1991)*



4.4 Woongroep Lugtensteyn, Bithoven, The Netherlands  
*The common kitchen is only designed for light refreshments, such as tea and coffee rather than large scale cooked meals.*

## Denmark

In 1964 an architect called Jan Gudmand Hoyer, and a group of friends decided that they wanted to live in an a more integrated model of living than was provided by any typical housing available on the market. The architect designed a prototype project for his group but the project was halted as a result of opposition from neighbours adjacent to the proposed site.

Gudmand Hoyer wrote an article *The Missing Link Between Utopia and the Dated One-Family House* which received a significant public response. Towards the late sixties there was significant social development led by the youth movement and another article *Children Should Have One Hundred Parents* questioned the suitability of the existing environment in which to raise children.

This increase in support allowed Gudmand Hoyer to design two initial projects with the residents groups, leading to the development of two of the first *bofællesskaber* (translated as living community) *Saettedammen*, and *Skraplanet* [4.5-6]. A later project, The Farum Project in 1970, was unsuccessful due to legislative and economic complications but it generated interest from several non-profit housing associations and subsequently the Danish Ministry of Housing sponsored a competition for housing in alternative settlements and dwellings. The winning design proposal, Tinggården, designed by the architecture practice Vandkunsten architects features clustered housing around a courtyard, each with its own common house [4.7]. Tinggården was completed in 1978 and is still considered a milestone in Danish Architecture. The success of this project significantly influenced later housing developments with collective facilities.



4.5 Bofællesskab Sættedammen, Hillerød, Denmark  
*The early projects were more conservative than some of the later projects and were private initiatives funded by the residents.*



4.6 Bofællesskab Sættedammen, Hillerød, Denmark  
*The common house at Sættedammen*



4.7 Boligselskabet Tinggården, Herfølge, Denmark  
*One of the four courtyard clusters. The common house is to the left of the image.*



*The common house features large windows, so that residents passing by can look in*



*A window detail on one of the residential houses. The project was ambitious in the use of architectural detailing in addition to the overall concept and site arrangement.*

## Sweden

A key development in the concept of collaborative living was the development of the central kitchen concept. During the 19<sup>th</sup> century servants became increasingly expensive. A centrally-staffed kitchen in an apartment building saved staffing costs, and rescued the middle class housewives from the drudgery of housework. These buildings were not designed to create social connections between neighbours or for residents to take part in collective activities, it was simply a means to solve the problem of providing domestic staff at a reduced cost.

With the modernist movement a new concept was developed with the principle of saving time. *John Ericsonsgatan 6* in Stockholm was the first functionalist collective block designed to facilitate a more rational way of living, allowing woman to have careers rather than stay at home. Child care was provided by a

professionally staffed kindergarten, time was saved preparing meals with a central kitchen and dining hall and social facilities were provided including space for games and sun-bathing on the roof.

Ideas about this functionalist way of living did not gain much support from the government or housing associations. Olle Engkvist, a private developer, was inspired by the John Ericsonsgatan 6 and developed a number of similar developments in Stockholm over a period of twenty years. These projects became particularly popular with single mothers as parents collaborated on childcare and this was generally found to be a good environment for children.

Olle Engkvist continued to develop this model of living. The final project before his death was the *Hässelby family hotel* [4.8-9]. This project was constructed in the 1950's and consisted of 328 apartments, a restaurant kitchen, a large dining hall



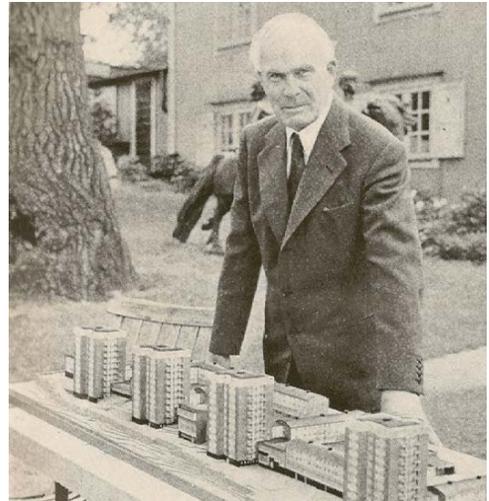
4.8 Hässelby Familjehotel, Stockholm, Sweden

*Architect's sketch of the four high rise residential towers and low rise housing blocks. In the centre is the main common area with the large restaurant.*

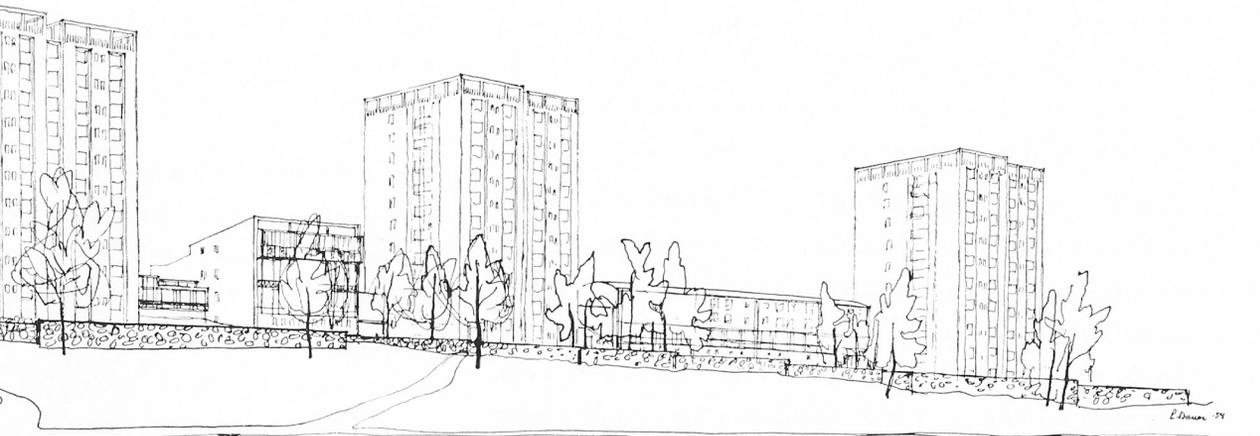
on several levels, a smaller dining room, a room for parties, a club room with its own cafeteria, a staffed reception, a shop with late opening hours, a kindergarden, a laundry, a sauna, a prayer-room and a gymnastic hall shared with the adjacent school<sup>3</sup>. As with previous projects, this provided affluent middle class families with a level of service which would otherwise have been unobtainable in individual households. By the 1960's this serviced model was starting to become outdated. In 1976 the landlord closed the restaurant against the residents wishes. The residents decided to try running the restaurant kitchen themselves. They found it very manageable and enjoyed working together. This led to the development of a new model of cohousing today.

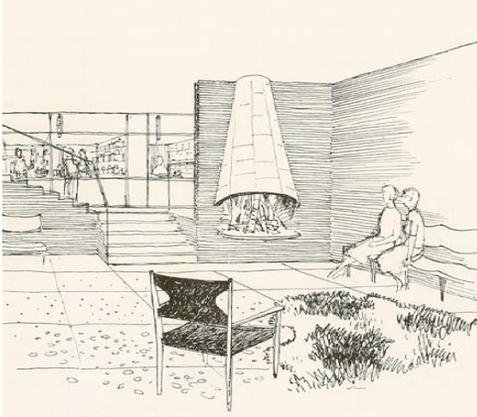
The Hässelby family hotel still exists, although because of its location - a long way from the centre of Stockholm - its popularity has fallen since affluent families have a tendency to live closer to

<sup>3</sup> Based on *Living together - Cohousing Ideas and Realities Around the World: Proceedings from the international collaborative housing conference in Stockholm 5-9 May 2010* Vestbro, D. (2010) Uvverstitetsservice US AB: Stockholm p.49 which provides an overview of the history of Kollektivhus concept in Sweden.



4.9 Olle Engkvist  
Pictured in front of a model of the Hässelby Familjelhotel.





*Architect's sketch of the main lobby*



*Photograph showing the dining room as it was originally intended. The level of service was quite high with employed staff in uniform (Image: Stig Dederer).*



*Architect's sketch of the internal street with access to the dining room, meal collection and a late night shop*

4.10 Images of the Hässelby Familjehotel, Stockholm, Sweden



*Photograph from a top floor apartment showing the residential courtyards with a garden space in the centre (Image: Stig Dederer).*



*The kitchen as it is today, with residents cooking an evening meal.*



*Unfortunately the grand dining room is no longer available the residents, so this smaller room is now used for gatherings.*

the centre. The building has dated, and lost many of the original collective facilities including the grand dining hall. The scale of the project is too large for a typical cohousing community, but a number of households throughout the building come together to cook and dine [4.10].

The concept of a collectivised kitchen managed by the residents rather than employed staff was retrofitted into a high-rise building called Stacken in Gothenburg in 1979. This was partly an experiment to see if the model would work, and partly to see whether it could be a means to rehabilitate the tower block. It had varying success. The Stacken project attracted people involved in the radical student movement but this group later had many disagreements. Some time following this a different group moved into the building and were more successful at rehabilitating the building<sup>4</sup>.

A series of experimental cohousing projects were constructed following Stacken including cohousing mixed with service housing, cohousing sharing facilities with nurseries, and cohousing providing collectivised care for seniors.

In a similar way to the Netherlands, many Swedish cohousing projects are constructed by housing associations and offer social housing.

---

<sup>4</sup> Ibid p.50

## The US

The US has an interesting and varied history of utopian experiments, some of which even inspired Jan Gudmand Hoyer when developing his concepts for the early Bofællesskaber projects in Denmark.

There have been a number of co-operative living projects developed in the US. The first of these to mention the social benefits, rather than more common issues associated with the liberation of the housewife and the servant problem, was as early as 1893. The concept had been proposed by a well-known feminist activist, Charlotte Perkins Gilman, and been envisaged by J P Putnam. The project envisaged a variety of suites of rooms, with and without kitchens. Advantages claimed were cost savings, freedom from management of servants, complete privacy and the advantage of increased social intercourse in the public rooms<sup>5</sup>.

There are a handful of early projects in the US which established detached housing with a separate common house. These projects developed independently of one another, and of the European models but can be considered very similar to cohousing in principle. The projects are documented in *Collaborative Communities* by Dorit Fromm<sup>6</sup> which shows six projects constructed between 1973 and 1979. In these projects many activities took place in the common house or rooms but were not used as frequently as in the European projects. Meal preparation usually took place once a week and was organised on an individual basis in the form of a pot-luck.

The first project to follow the Danish model of cohousing, adapted to the US with a dedicated community kitchen was the Muir Commons development by the Cohousing Company and Architects Dean Unger Associates, constructed in 1991<sup>7</sup>. The design consisted of a suburban development of grouped housing with a separate common house located centrally.

The US movement has been strongly influenced by Kathryn McCamant and Charles Durrett who were involved in many of the early projects and helped to popularise the concept with their book *Cohousing*. There have since been a large number of new cohousing developments in the US. The greatest concentration of projects is in California but there are also clusters of developments in Colorado, to the East Coast and in many other parts of the nation.

Many, although not all US cohousing projects place more prominence on the individual family house. An example of this is at Pioneer Valley Cohousing, in which each house, including the common house are completely detached [4.11-12]. This project was one of the first cohousing projects on East Coast, constructed in 1995.

<sup>7</sup> McCamant, K. & Durrett, C. (1988) *Cohousing: A Contemporary Approach to Housing Ourselves USA*: Ten Speed Press p.210



4.11 Pioneer Valley Cohousing, Amherst, Massachusetts, USA  
*Typically many US cohousing projects have increased prominence of the detached family home, although this is less evident in some more recent projects.*

<sup>5</sup> Pearson, I.F (1988) *The Architectural and Social History of Cooperative Living* London: The Macmillan Press p.72

<sup>6</sup> Fromm, D. (1991) *Collaborative communities: cohousing, central living, and other new forms of housing with shared facilities* New York: Van Nostrand Reinhold; London: Chapman and Hall



*The approach to the site. Pioneer Valley Cohousing is located in a rural environment.*



*The common house to the right*

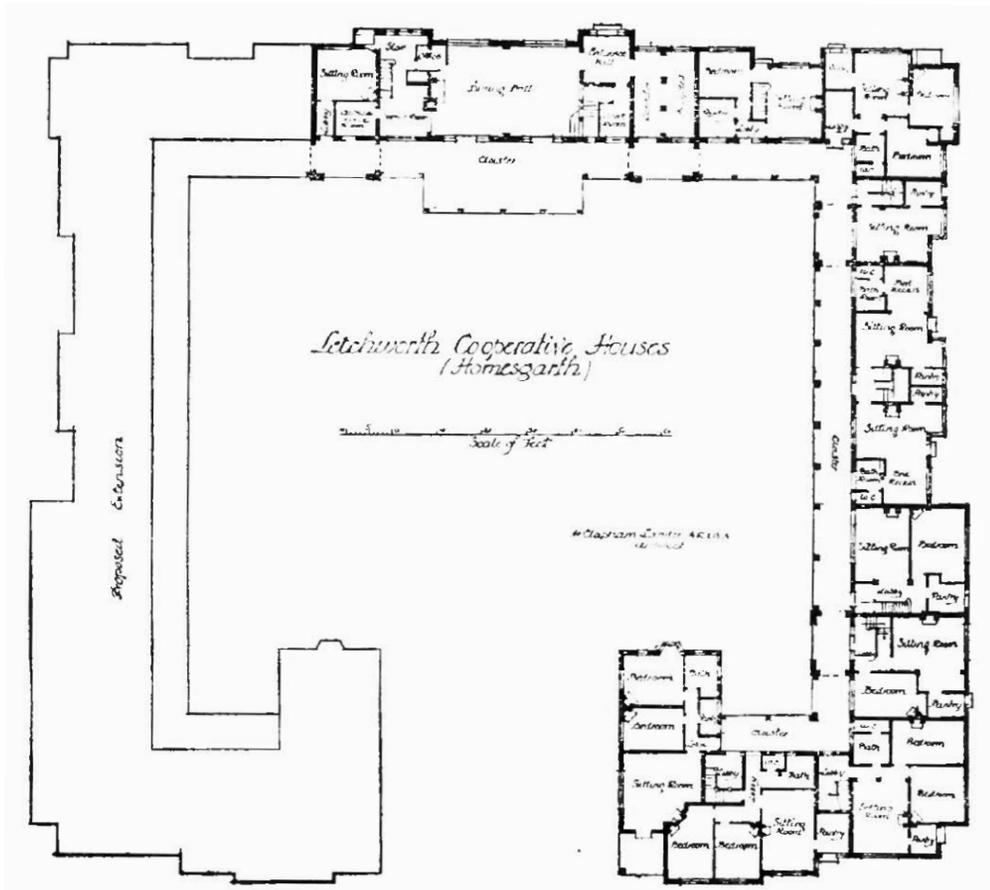


*Walking along one of the loop pathways connecting the households.*



*Inside the common house.*

4.12 Images of Pioneer Valley Cohousing, Amherst, Massachusetts, USA



4.13 Ground floor plan of Homesgarth, Letchworth, UK (now known as Sollershot Hall)  
 Note the incomplete plan, the central dining area, and the kitchenless apartments and quadrangular  
 Image: Purdom, C. B. (1913)

## The UK

The UK also had a number of apartments with collective facilities between the 1870's and 1930's although these were orientated around the same central kitchen and dining concept used in Sweden. These projects were a means to collectivise servants and save middle class housewives from the drudgery of domestic labour at this time rather than having a truly co-operative element. Many of these projects did provide some social spaces and there is varying evidence to suggest how social the common dining experience was in such projects. Whilst social interaction was not an important selling point, the concept was popular until social changes and improvements negated the need for this model of living.

During the start of the 1900's the garden city movement provided a means to further develop



4.14 The dining hall at Homesgarth in 1910  
*Note the size of the tables. Social interaction was not the main intention of the dining hall although it was suggested that there was a social atmosphere (Purdon 1988 p.101).*

ideas about co-operative living. Many ideas were drawn up; however few were realised. The concept was still primarily seen as a means to solve the problem of employing service staff. However more weight was given now to the social benefits of living in a collective project. Perhaps the most significant experiment constructed during the garden city movement was *Homesgarth* designed by H Clapham Lander and brainchild of Ebenezer Howard. The project was only half completed in 1910 and remains this way today which suggests that financing was limited and not enough prospective tenants were willing to place a purchase deposit in advance. This meant the project never reached its full design intention. What should have been a quadrangular courtyard enclosing a central garden is instead a less defined L form [4.13-15]. Fewer residents also meant that collective costs would have been higher than expected which may have further hampered the project. The collective kitchen at



4.15 The central garden at Homesgarth (present day)  
*The project still provides pleasant housing today. The design never reached its full potential as a result of the incomplete quadrangular enclosure to the central space.*

Homesgarth stopped when the cost of running the kitchen became too high and the economic model failed.. There was also a decrease in demand for employed residential staff with social changes, and advances in home appliances. The common area facilitated a residential club room for some time but was later converted into an apartment by the housing association.

A later project *Meadow Way Green* constructed in 1914 originally consisting of just seven houses and later completed with a further seven in 1924, was inspired by an Austrian or German communal scheme [4.16]. This project came closer to the concept of co-operative living than Homesgarth. A cook was employed in the kitchen but each resident planned the menus, ordered the food, kept the accounts and paid the bills and the cook. This project continued successfully for many years and only finished when the residents reached an age where it became difficult to undertake the common tasks<sup>8</sup>.

The demand for servants, central kitchens and co-operative housekeeping lessened with the introduction of labour-saving domestic devices. Many of the early projects still exist today and provide good housing but have since been converted into typical apartments with individual kitchens.

The modernist period brought a variety of new housing projects with some communal facilities, but any projects with kitchens still relied on employed kitchen staff. Later on, the 1960's saw the introduction of the commune, several of which started with a basis of sharing everything, but over time many these either failed or adapted to a more private/communal balance in both physical arrangement and organisation. For example residents at the *Old Hall Community* each have their

8 Pearson, I.F (1988) *The Architectural and Social History of Cooperative Living* London: The Macmillan Press p.112



4.16 Meadow Way Green, Letchworth, UK (present day)  
*Showing the north side of the square.*



4.17 Old Hall Community, East Bergholt, Suffolk, UK  
*The Old Hall Community is a commune in which residents each have their own private apartments providing a balance between community life, and complete privacy.*

own private apartment within the large old building [4.17].

In the Netherlands the support of politicians and housing associations had a big influence on the development of cohousing; in Denmark architecture had a significant influence on the early designs; in Sweden the cohousing model was almost discovered by accident following the closure of the restaurant at the Hässelby Family Hotel; and in the US the concept has been promoted by architects. In our own set of events it is likely our own adaptation of cohousing has been inspired by the projects abroad.

Most of the UK cohousing projects developed after the 1990's have been retrofitted into existing buildings many of which are large country houses and farm estates [4.18-19]. There have more recently been a handful of new build projects allowing a greater level of design flexibility.



4.18 Trelay Farm, Devon, UK

*A cohousing project retrofitted into an existing rural infrastructure.*



4.19 Threshold Centre, Gillingham, Dorset, UK

*Another UK rural cohousing project, but with a considerable expansion of purpose built residences providing a sense of enclosure to the central space.*

# 5. UK Housing Culture

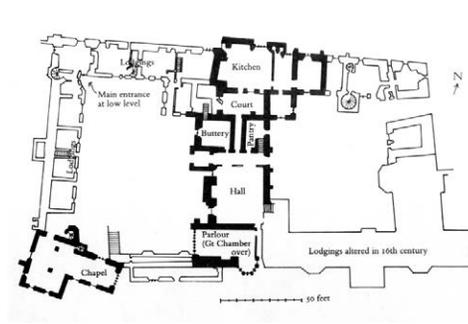
How open are people in the UK to alternative models of living? In the UK we have a particularly conservative housing market which has been influenced by a number of factors including our cultural associations with the house, our market expectations and market choice. Many historic factors still influence what we expect from a home today.

It is also worth noting that UK housing culture has traditionally been seen differently to other parts of Europe. The saying *An Englishman's home is his castle* gives an indication of the private nature of our housing culture. Although this saying is many centuries old, it still carries some weight today.

In pre-industrial Britain, it was common for the house to facilitate a number of activities and people: the extended family, friends, servants, apprentices; the private sphere, work, recreation, the care of the sick; all co-existed and overlapped [5.1]. The master bedroom could, for instance, serve as the most important room of the house or be immediately adjacent to it<sup>1</sup>.

Later, in the eighteenth and nineteenth centuries, this mixture became unpopular and more of a focus was placed on private life which eventually led to the development of the nuclear family. This desire for privacy has significantly influenced the fundamental design of our existing housing stock. For example, the tendency for the doors

<sup>1</sup> Muthesius, S (1982) *The English Terraced House* p.39



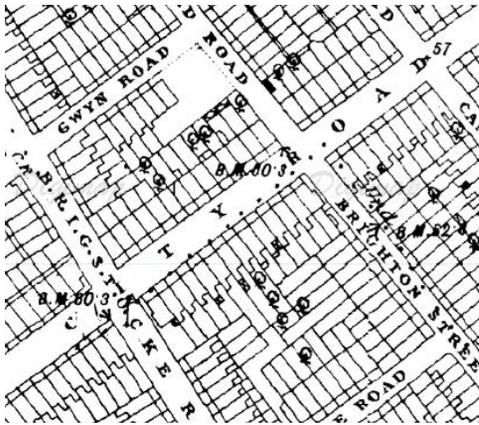
5.1: Haddon Hall, Derbyshire C12th - 17th  
*Note the mixed circulation and mix of room uses. The central space is the hall.*



5.2: Bilney House, late C18th  
*Note the separate servant circulation and separation of uses.*



5.3 C19th English Townhouse  
*Note the separation from the street, and raised windows on the ground floor.*



5.4: St Pauls, Bristol (Map circa 1880)  
*Note the larger terraced houses are on the main streets (such as City Road), smaller terraces are on the side streets, and the smallest houses are on the back streets. These terraces would have been constructed around 1850.*

of the individual rooms to be placed as far apart as possible, and in larger houses the introduction of separate circulation routes for servants [5.2]. It was essential to have passages, or corridors, so as not to have to go through another room - this is different to continental dwellings. Generally each class group aspired to the class above which meant developments in larger houses also influenced the development and design of smaller houses.

This demand for privacy also went beyond the individual dwelling and had considerable effect on the street. When referring to the better classes, White in 1877 wrote:

Englishmen [in contrast to Parisians] do not desire to get out, or even look out of the windows; balconies are useless.<sup>2</sup>

Although traditional street habits for the working classes remained, eighteenth to mid-nineteenth century terraced houses, many of which still form a large part of our existing housing stock today, were designed to be socially above the ground - separated from the street by a gap [5.3]. Earlier, it was common for the best houses or terraces to be placed along the best streets, or main thoroughfares, and the small houses tucked away behind [5.4] - then the opposite became the rule:

The 'best' district of the town is found in the secluded, quiet position, often near a park; the main suburban thoroughfares are lined with small houses, no bigger than the ordinary houses behind.<sup>3</sup>

There were some exceptions to this trend, mainly in working class dwellings and only in hard times, due to economies of construction. A number of houses

2 White, W. H. (1877) 'Middle Class Houses in Paris and Central London' in *Sessional Papers of the Royal Institute of British Architects* 1877-8, pp21-65  
 3 Muthesius S. (1982) *The English Terraced House* p.249

had coupled front doors and combined backyards and during tough times a number of working families doubled up to the extent that in 1911 forty per cent of all Londoners had to share a house<sup>4</sup>.

The introduction of the private garden also had a significant influence on UK housing. George Cadbury advocated home-grown produce for his workers and provided generous gardens in the late nineteenth century - at the time this was considered an innovation<sup>5</sup>[5.5]. The garden city housing reformers of the early nineteenth century such as Raymond Unwin strongly believed in a return to the principles of a traditional country 'cottage', designed for the nuclear family and surrounded by garden [5.6]. Such designs had a great influence on the development of the suburbs, and promoted the semi-detached model of the home, surrounded in greenery. This model was the basis for a large proportion of post-war development.

The development of the garden suburb, combined with the continued English desire to separate home from work, is likely to have further added to the notion of the private nature of the house and the strong desire for UK residents to have their own garden [5.7-8].

There is also a trend in the UK for a historic dislike and distrust of high block dwellings. It has been suggested that this is partly due to the refusal of the better classes to live in close proximity to the lower classes; the popularity of the traditional building methods and an earlier and more significant process of speculative building; and an association with high block dwellings relating to the tenement blocks for the poor. A house was seen as a higher status symbol when compared with a tower block<sup>6</sup>. In



5.5: Bournville  
*Workers houses in Bournville were generous and were usually provided with front and rear gardens. This was a revolution in worker housing.*



5.6: Cottage at Letchworth Garden City  
*One of many variations of the garden city cottage. The increase in green space in this case was more about moving away from the dirty industrial city life than anything to do with privacy.*

4 Webb, A.D. (1911) *The new Dictionary of Statistics of the World to the Year 1911* p.301 London, G. Routledge and Sons; New York, E.P. Dutton and Co.

5 Muthesius S (1982) *The English Terraced House* p.249  
6 Ibid p.184

contrast, flats were the more common model among speculative builders in many European countries. The closer proximity of all classes and the use of communal courtyards may have led to the difference in cultures between the UK and abroad.

There are relatively few publications containing observations of UK housing culture. One of the key recognised texts on the subject was written by a German author who often compared English culture to other areas of Europe. *Hermann Muthesius* was a German architect, author and diplomat and in 1904 published *Das Englische Haus*<sup>7</sup>. The book is a vast encyclopaedia of English houses with information relating to houses of all classes. Muthesius observes that Britain is an island separate from Europe, which he believes has been part of the reason for differences in our housing culture:

Separation from its nearest neighbour gives the island its independent development; links with the remotest bring influences from afar which are bound to intensify individuality.<sup>8</sup>

Muthesius also comments on:

- the English love of houses, rather than flats:

England is the only advanced country in which the majority of the population still live in houses, a custom that has survived all the political, social and economic changes that European civilisation has undergone in the past hundred and fifty years.<sup>9</sup>

In England people of every level of income live in private houses.

7 Muthesius, H (1904) *Das Englische Haus* translated and edited edition *The English House* published in 1979 London: Crosby Lockwood Staples

8 *Ibid* p.3

9 *Ibid* p.3



5.7: Suburb formed of terraces

*The terraced house is a common sight in the UK, each with a plot of land at the rear.*



5.8: Suburb formed of semi-detached houses

*The garden city movement influenced a large portion of the post war housing development. This is a typical example of a post war suburb in England.*

- the desire for privacy within the home:

Englishmen usually shake their heads at the sight of a continental ground-plan with its ubiquitous communicating doors and in a continental house they might feel as though they were perpetually sitting out in the street. They would see this as an interference with one of their most conspicuous needs, their desire for privacy, for seclusion<sup>10</sup>.

- and the individuality of people within English culture compared to the continent:

[a well known element to the Englishman's character is an] uncommonly highly developed independence of the individual, which means that, as is so often the case, it is simply the outcome of virtues that have been cultivated too one-sidedly<sup>11</sup>.

The Anglo Saxon race has displayed one fundamental characteristic: this is its pronounced sense of self-sufficiency and its attendant powerful urge to independence.<sup>12</sup>

While many of these comments were made over a century ago, many of Muthiesius's observations are the same as those made by Kate Fox in her publication *Watching the English* (2004) published one hundred years after the publication of *Das Englische Haus* (1904). Fox's observations also include comments on privacy:

The English obsession with privacy dominates our thinking and governs our behaviour.<sup>13</sup>

Fox also highlights the popularity of *domestic pursuits*.

---

<sup>10</sup> Ibid p.79

<sup>11</sup> Ibid p.3

<sup>12</sup> Ibid p.3

<sup>13</sup> Fox, K (2004) *Watching the English* p.208

Fox defines these as the large number of social and leisure activities which relate to the home more so than in other European countries - *the go home, shut the door, pull up the drawbridge method*<sup>14</sup>.

The most domestic pursuits are the most popular: watching television, listening to the radio, reading, DIY and gardening, and surveys suggest people would rather entertain a few close friends or relatives in the safety of their own homes than venture out among strangers.<sup>15</sup>

Fox also identifies the class differences within England although this mainly relates to the interiors of houses. It is important to note that class separation is not anything like it was a century ago: today, most larger terraces have been converted into a number of flats, which brings more similarities with the continental style of living [Fig 70]. Similarly, the smaller streets and terraces are inhabited today by a much greater mixture of classes than ever before.

Although there are regional differences, it can be suggested that in the UK there are some cultural traits affecting the type of housing typologies currently offered and that there are inherent differences from the continental pattern. These include the popularity of houses over flats; a lack of attention to the design and quality of streets and a desire for privacy and 'domestic pursuits'. The principle of individuality and the importance placed on home ownership by the Thatcher government, which placed the focus on the individual rather than society as a whole, is likely to have added to this influence [5.9].

These factors, coupled with the conservative nature of many developers in the UK, have influenced our cultural expectation of what to expect from

---

<sup>14</sup> Ibid p.208

<sup>15</sup> Ibid p.208

housing, how it should function, how it should look and how it should be arranged. The UK population are unlikely to consider more collective models of living because so few have lived in a collective environment beyond a student halls of residence earlier in their life, or in a more institutionalised setting later in life [5.10].



5.9 Right to buy  
*'Right to buy' introduced in the Housing Act 1980, allowed Council tenants to purchase their Council house from their Local Authority at a subsidised price. It was one of the first major reforms introduced by the Thatcher government.*



5.10 The Lawns Halls of Residence, University of Hull  
*This is one of the few alternatives forms of accommodation that people in the UK are exposed to and many adults may have positive or negative memories from the experience.*

## 6. Observations from the field research

### The field research consisted of three stages:

#### Stage 1:

A field investigation of the current UK cohousing schemes under development to identify the current progress made to date on cohousing and whether any of these schemes are inclusive to older members of society and whether the design of these schemes has been influenced by UK culture.

#### Stage 2:

An exploration into the main cohousing schemes within Europe - the 'official' starting place of cohousing. This would involve visiting several cohousing schemes within the Netherlands, Denmark and Sweden. Most of the key literature on cohousing was published in the eighties and early nineties. Are these early experiments still working as intended, now that a portion of the occupants could be considered to be 'older' or 'elderly' residents? How do cohousing schemes cope with the turnover of occupants? Are they inclusive to the elderly? How well do 'senior' cohousing schemes work? What is different about this area of Europe which makes Senior Cohousing so popular? It is estimated there are now over 230 senior cohousing schemes in the Netherlands alone - the UK has zero.

#### Stage 3:

An exploration of some of the more recent cohousing schemes in the USA to identify whether these schemes are closely related to European models, or whether principles have been adapted to take account of cultural differences. How has use and design of the cohousing schemes been adapted to cultural differences and are the schemes inclusive to older residents?

## UK

Trelay Farm, Devon  
Threshold Centre, Gillingham, Dorset  
Stroud Cohousing, Stroud, Gloucestershire  
Stroud Coflats, Stroud, Gloucestershire  
LJLAC Cohousing, Leeds, West Yorkshire

## Denmark

Bofællesskab Bakkefaldet, Roskilde  
Bofællesskab Glahusene, Roskilde,  
Bofællesskab Munksøgård, Roskilde  
Bofællesskab TrekonerBo, Roskilde  
Bofællesskab Lange Eng, Albertslund  
Seniorbofællesskabet Egebakken, Nødebo  
Bofællesskab Jernstoberiet, Roskilde  
Boligselskabet Tinggården, Herfølge  
Farum Midtpunkt, Farum  
Bofællesskab Sættedammen, Hillerød  
Bofællesskab Jystrup Savværk, Jystrup  
Bofællesskab Kilen, Østerhøj

## Sweden

Kollektivhus Tre Portar, Stockholm  
Kollektivhusföreningen Färdknäppen, Stockholm  
Bogemenskapen Sjöfarten, Stockholm  
Kollektivhuset Kupan, Älvsjö  
Kollektivhus Prästgårdshagen, Älvsjö  
Hässelby Familjehotel, Stockholm  
Kollektivhus Dunderbacken, Stockholm  
Kollektivhus Tullstugan, Stockholm  
Kollektivhus Trekanten, Stockholm

## The Netherlands

Woonkollektief Purmerend, Purmerend  
Centraal Wonen Lavendelstraat, Haarlem  
Centraal Wonen Drielandenhuis, Haarlem  
Centraal Wonen Romolenpolder, Haarlem  
Groene Veste, Woongemeenschap 55+, Haarlem  
Centraal Wonen Houtwijk, Den Haag  
Centraal Wonen Katerstraat, Den Haag  
Centraal Wonen Fultonia, Den Haag  
Centraal Wonen Delft, Delft  
Centraal Wonen Zevenkamp, Rotterdam  
Centraal Wonen De Banier, Rotterdam  
Woongroep Orkide, Rotterdam  
Kasko Group (KWU), Utrecht  
Woongroep Olivier Van Noort, Gouda  
Woongroep Lugtensteyn, Bithoven  
Woongroep Het Kwartel, Culemborg  
Centraal Wonen De Bonvivant, Rotterdam  
Woongroep De Hofstaete, Hoogvliet  
Centraal Wonen Klopvaart, Utrecht  
Centraal Wonen Zonnespreng, Driebergen  
Woongroep Nieuw Wede, Amersfoort  
Centraal Wonen Karel Doormanhof, Vlaardingen  
Centraal Wonen Hof van Heden, Hoogvliet  
Woongroep Castellum, Amersfoort  
Woonvereniging Voormekaar, Boxmeer  
Centraal Wonen De Stam, Tilburg  
Centraal Wonen Hilversum, Hilversum  
Woongroep Kwackershof, Enkhuizen  
Vrijburcht, Amsterdam  
Centraal Wonen De Meenthe, Tilburg  
Vereniging AWDO Kreilerburcht, Rotterdam,  
De Plussenburgh, Rotterdam,  
Woongroep Senioren Wendakker, Amersfoort

## USA

Jamaica Plains Cohousing, Boston  
Cornerstone Village Cohousing, Boston  
Cambridge Cohousing, Boston  
Pioneer Valley Cohousing, Massachusetts  
Camelot Cohousing, Berlin, Massachusetts  
Mosaic Commons Cohousing, Massachusetts  
Eastern Village Cohousing, Washington DC  
Takoma Village Cohousing, Washington DC  
Shadowlake Village Cohousing, Virginia  
Elderspirit, Bristol, Virginia  
Silver Sage Cohousing, Boulder, Colorado  
Wild Sage Cohousing, Boulder, Colorado  
Boulder Creek Cohousing, Boulder, Colorado  
Harmony Village Cohousing, Golden, Colorado  
Hearthstone Cohousing, Denver, Colorado  
Highline Crossing Cohousing, Colorado  
Nomad Cohousing, Boulder, Colorado  
The Commons on the Alameda, New Mexico  
Tres Placitas del Rio Cohousing, New Mexico  
Sand River Cohousing, Santa Fe, New Mexico  
Stone Curves Cohousing, Tucson, Arizona  
Sonara Cohousing, Tucson, Arizona

## Other non-cohousing projects visited (but relevant to the project)

Meadow Way Green, Letchworth, UK  
Sollershot Hall, Letchworth, UK  
Old Hall Community, East Bergholt, Suffolk, UK  
De Rokade, Groningen, The Netherlands  
Hodgeway Dementia Centre, The Netherlands  
Boston Hostel, Boston, USA

## Cohousing communities

*List of the cohousing communities visited on behalf of the research project.*

# Cohousing in the UK

## Current progress in the UK

Cohousing has been late to develop in the UK in comparison with the other countries visited as part of this project. The UK Cohousing Network has been established for some time and offers a well designed web portal for access to a range of information. The organisation provides a list of established and forming groups, arranges events, keeps a library of related cohousing research and makes this accessible to the public. The network is key to changing people's perceptions about cohousing and helping the cohousing movement grow.

To date the UK has 14 established groups, many of which exist in rural historic buildings, retrofitted or adapted over time [6.1]. There are currently very few new build projects. Springhill Cohousing<sup>1</sup> was the first purpose-built cohousing project in the UK [6.2]. This was followed by LILAC Leeds<sup>2</sup> (Low Impact Living Affordable Cohousing) which has been successful in pioneering a new community financing model and is constructed using a new prefabricated straw bale construction system [6.3]. Lancaster Cohousing<sup>3</sup> is the most recent project to be constructed.

1 Springhill Cohousing located in Stroud, Gloucestershire, UK

2 LILAC Leeds located in Leeds, West Yorkshire, UK

3 Lancaster Cohousing located in Lancaster, Lancashire, UK

Name	Date of completion	Location	Type	Rural/Urban
Canon Frome Court	1979	Hertfordshire	Converted country manor	Rural
Trelay Farm	1992	St Genny, Cornwall	Converted farm	Rural
Thundercliffe Grange	1994	Rotherham, Yorkshire	Converted country manor	Rural
Threshold Centre*	1995	Gillingham, Dorset	Converted farm	Rural
Courtyards Community	1995	Bradford-on-Avon, West Wiltshire	Converted school	Rural
Earth Heart	1997	Derbyshire	Converted farm	Rural
Postlip Community	1998	Winchcombe, Gloucestershire	Converted country manor	Rural
Laughton Lodge	2000	Laughton, Leicestershire	Converted country manor	Rural
Stroud Co-flats	2006	Stroud, Gloucestershire	Converted church	Urban
Springhill Co-housing	2004	Stroud, Gloucestershire	New build	Suburban
Bowden House Community	2008	Bristol	Adapted house	Rural
Cohousing Bristol	2010	Bristol	Adapted house	Suburban
Lancaster Cohousing	2012	Halton, Lancashire	New build	Suburban
LILAC Leeds	2013	Leeds, West Yorkshire	New build	Suburban

6.1: Overview of UK projects to date

*Note the predominance of retrofit and rural projects.*



*The common house and residential flats*

6.2: Springhill Cohousing, Stroud, Gloucestershire, UK



*The 'street'*



*The central garden space*

6.3: LILAC Cohousing, Leeds, West Yorkshire, UK



*LILAC Leeds is constructed using a high performance prefabricated straw bale construction system and has excellent environmental credentials.*

Although there are no completed examples of senior cohousing within the UK, there are at least three established senior cohousing groups within the UK. The most well established of these is the Older Woman's Cohousing Group (OWCH) located in London.

Maria Brenton, a member of OWCH, has written a number of publications on senior cohousing which makes her one of the UK's leading authors on the subject. An interview with Brenton was undertaken to gain an understanding of some of the reasons why senior cohousing is so uncommon in the UK<sup>4</sup>. This is a summary of the key issues raised at the interview:

The OWCH group is the first senior cohousing group to get planning permission but this was not a simple process. It has been fifteen years since the group was formed and it still does not have a completed project, although considerable progress has been made. Many of the other multigenerational cohousing projects in the UK have taken considerable time but the length of the project development time can be considered of greater significance to a senior project. Older people tend to have more time and resource to put into a project, but do not have as much remaining 'life time' on their side. A number of the OWCH group have left and one, a key member of the group, has died during the community development process.

The OWCH project's development has been delayed by several important factors:

Housing associations and local authorities, although at first apprehensive, became supportive of senior cohousing once the benefits of cohousing were clearly illustrated but as an unknown concept with a lack of existing precedents in the UK it created



*OWCH will be the first senior cohousing group in the UK and is expected to be a precedent for other projects to follow.*



*The group has been working for many years to turn their vision into a reality. Images: Linda Nyland on behalf of OWCH*

#### 6.5: OWCH group meeting

<sup>4</sup> Interview Date: 11 October 2012

problems with normal procedures and legislation used by the various local authorities and housing associations. Housing associations also have a tendency to develop projects at a distance from the end user, which was quite different to the level of consultation the group required.

Planning delays and complications caused considerable delays. In one case problems were caused by a changeover in the planning case officer who had different opinions to the previous officer.

Financing the project is also not a simple matter. The cost of land is expensive, particularly in urban sites and limited the group's options. Brenton highlighted that there are ways to overcome this with the *Community Land Trust Model*. Also many members of the group had equity but this was tied up in their current property.

There was also a lack of joined-up collaboration between different government departments. Social services considered a group senior development as a drain on local resources rather than recognising the long term benefits of senior cohousing. Had each of the women moved into separate housing within the same borough this would not have been considered a problem to the local authority and ironically this method would be likely to cost them more in social services expenditure.

## Developer-led cohousing

It is worth mentioning that a planned project, Baltic Wharf Cohousing, located in Totnes, Devon, recently failed due to escalating costs. This scheme was going to be different in two ways: it included both multigenerational cohousing and an elderly care facility as part of a larger private development



6.6: Baltic Wharf Cohousing (in planning)

*Baltic Wharf, Totnes, Devon was to be the first ever cohousing project in the UK to be procured by a developer, but retain the community involvement usual to cohousing schemes. Unfortunately the project failed due to escalating house prices and eventually the cohousing group had to pull out.*

scheme; and it would have been the only scheme to be constructed as part of a larger developer-led housing project. This shows that the potential for cohousing is now becoming recognised by developers, and that cohousing can be used to gain planning leverage in some local authority areas. One resident of the Stroud Coflats explained that sustainable principles of cohousing had been used as a means to positively influence the local authority following the success of the initial Springhill Cohousing project.

### **Challenges associated with age in multigenerational cohousing**

In all of the UK projects visited there were many residents in the 50 to 80 age group. The most common age group appeared to be the 50 to 65 cohort who originally moved into the cohousing project as young parents with children.

Age balance is an important factor in cohousing whether multigenerational or senior. If too many adults are of the same age, there is a risk that the age imbalance deters young adults and families from moving in which is necessary to sustain the community. There is also the danger this boom of a particular age group will age at the same time which may cause problems as the demands of this group increase into old age [6.7].

The need to balance the community age range may make these multigenerational communities reluctant to accept old adults into the community. This does not affect senior cohousing schemes to the same extent, although even senior schemes are likely to be reluctant to accept new residents over 70 years of age. This highlights the importance to plan for old age and to move earlier rather than later.



6.7: Trelay Farm, Devon, UK  
*At the time of visiting, Trelay Farm was having difficulty attracting young families.*



6.8: Stroud Coflats, Stroud, Gloucestershire, UK  
*A centrally located project*

## Disappointed at planning refusal

Madam – Chas and I have been called many things over the years but being accused of being part of an “absolutely dead weirdy” scheme is a new one on us.

Why have we chosen to be part of the co-housing scheme? We found out about it late last year. We started looking at it as vague possibility because we wanted to move back to Stroud – our home town.

The more we learned the more appealing an option it became. It was just so exciting. A once-in-a-lifetime opportunity to build our own home.

We also liked the concept of being part of a community and sharing with our neighbours. This is nothing new in Stroud and wherever we lived we would have expected to be part of a community which cared about its neighbourhood.

6.9: Planning refusal

*One of the many issues faced by the Springhill Cohousing community.*

### Key

1. Parking area
2. Common house
3. Pedestrian street
4. Shared gardens
5. Houses
6. Flats
7. Studios



510: Springhill Cohousing, Stroud, Gloucestershire, UK

*Site plan indicating the mixture of different house and apartment types suitable for adults at different stages of life.*

The predominance of rural sites and retrofit buildings also had an implication on accessibility. Some projects in older buildings are physically less accessible which may also make them less inclusive to older adults. In most cases adaptations were made as and when they became necessary.

It could be argued that urban locations are more suitable to older residents due to better access to public transport, health facilities, and cultural facilities. It is also becoming increasingly important to be near to employment opportunities as many older people will be required to continue to work part-time or maintain work links further into retirement [6.8].

Finding urban sites large enough to accommodate a cohousing project is difficult in the UK as there is a general lack of sites. Urban sites come with high land prices and the cohousing projects which

did manage to find urban sites faced considerable opposition from the surrounding community due to a misunderstanding of cohousing [6.9]. This reason might contribute to the lack of urban schemes - there is potentially more opposition to planning applications. It is expected this will change as public and local authorities become better informed about cohousing.

It is more common for cohousing projects to have a lack of younger adults. This is for several reasons:

- Younger adults tend to prefer urban locations for their social, cultural and work opportunities. The UK predominance of rural cohousing, rather than urban cohousing, due to high land prices and a lack of available sites may be less attractive to younger adults.

- Young adults may be less willing to settle or commit to a long term investment in property. Younger adults often prefer mobility in order to seek opportunities at this stage of their life.
- Many cohousing developments in the UK rely on private home ownership, rather than rentable flats or co-operative households, which can result in a price too high for younger adults.

There are several cohousing projects which value a mix of income groups and age ranges and subsequently offer a range of tenure in order to attract younger adults and people who cannot afford or commit to a mortgage. Most of the projects also have a range of house/apartment sizes which would suit younger and older singles or couples [6.10].

In some projects the variety of accommodation units within the community allowed residents to exchange apartments either with another resident or when a new apartment became available. This is particularly important for residents as they reach a different stage of life. Some apartments will be more suitable for older residents than others - for example ground floor units or accessible units. Also, the size of a household will often change. If a family of five occupants reduces to two when the children have moved out, it may be possible to arrange an exchange between residents. This is usually dependent on the financial and ownership details agreed by the cohousing group, but still provides more flexibility than in a typical residential neighbourhood. The advantage is that residents can move to a more suitable property without leaving their existing neighbourhood community.

In many cases older residents claimed that roles adapted as they aged, in a similar style to a traditional family model. Older residents tend to become less involved in the main physical tasks and step away

from intensive tasks such as chairing committee meetings and instead assist with child care, cooking, less physically intense gardening or provide training sessions in various skills. This allows a degree of adaption to different roles whilst remaining a social and active part of the community.

Multigenerational communities provide a greater range of inter-generational interaction which has become increasingly rare in the UK. With a trend towards family moving away and fewer grandparents spending time with grandchildren, this could be considered an important aspect to the social mix. It is also a means to help society adapt traditional perceptions about the elderly and give older residents the opportunity to impart wisdom and life experience. This is not to say that senior cohousing does not have intergenerational interaction. In a senior project with an age range of 50 to 100, a 55-year old will feel quite young compared to an 80-year old. It was also suggested that in senior communities it is easier to focus on adult activities, compared to multigenerational cohousing which often has a focus on children.

In conclusion it appears that many of the projects perhaps unintentionally do consist mainly of older adults as a result of the original cohort staying in place and ageing together. Multigenerational cohousing is inclusive to older adults, but it becomes more of a challenge to keep a balanced demographic with the introduction of young families.

## **Does the UK have its own variation of cohousing?**

The UK has a high proportion of retrofit projects in comparison to new build projects. This is an indication of the difficulty of obtaining suitable sites and is a sign that retrofit will be a key route to

creating urban cohousing in the UK. The retrofit projects have already given an identity to UK cohousing although this is likely to change over time. The UK has a predominance of old country houses and farms which do give a very different atmosphere to the suburban projects of Denmark, or the urban projects in Sweden.

At Trelay Farm<sup>5</sup> and the Threshold Centre<sup>6</sup> the old farmhouse has become the common house [6.11]. In these cases the existing buildings did cause some design constraints and some areas did not adapt particularly well to the design principles of cohousing such as having the common house in the centre of the development; or the facility having common areas interlinked with one another [6.12]. Often the existing buildings had thick walls making adaptation of existing rooms difficult and limited visual connections between inside and out. Such constraints do make a difference as passers-by will find it difficult to see who or what activities are taking place within the common house.

Postlip Community<sup>7</sup> and Thundercliffe Grange<sup>8</sup> are adapted country houses [6.13]. This is an aspect not seen to the same extent in the European and US schemes (possibly as a result of the preponderance of country houses in the UK). Despite the fact that these buildings would have originally been designed for privacy and the separation of servants and masters, such buildings have adapted well to cohousing. The interiors have proved to be flexible and the close proximity of different apartments helps reinforce a sense of community. The generous proportions of the kitchens and dining areas often found in large country houses also help with the suitability of the spaces. The grand scale of the ground floor rooms work well as common



6.11: Threshold Centre, Gillingham, Dorset, UK  
*The existing farmhouse is used as the common house.*



6.12: Trelay Farm, Devon, UK  
*The games room is detached from the main common house and is not centrally located. This means there is less likelihood of spontaneous activity occurring and subsequently the room is not used as much as was anticipated.*

5 Trelay Farm is located in Devon, UK

6 The Threshold Centre is located in Gillingham, Dorset, UK

7 Postlip Community is located in Winchcombe, Gloucestershire, UK

8 Thundercliffe Grange is located in Rotherham, Yorkshire, UK



6.13: Thundercliffe Grange is located in Rotherham, Yorkshire, UK  
*An example of a cohousing community which has adapted an existing large country house. Image: Grenoside Sword Dancers*



6.14: Springhill Cohousing, Stroud, Gloucestershire, UK  
*The family houses are larger than conventional cohousing units because residents were unsure about the 10% reduction in floorspace more commonly found in European cohousing projects.*

spaces. Many estate houses of this size have period features creating a sense of grandeur which would be difficult to recreate in a modern project with a similar budget. The proximity of common spaces also works well as all facilities are contained within one building and often on the same level with big interconnecting doors. This creates quite an impressive atmosphere and a real feeling of shared ownership.

There are too few new projects to know if the UK has its own variation of cohousing. Springhill Cohousing, completed in 2004 and designed by *Architype* echoes that of many Danish designs, the only difference being that the houses are generally larger because the residents were not willing to take the risk of sacrificing floor space [6.14]. LILAC Leeds is perhaps the most contemporary in design. This project uses a new sustainable prefabricated method of construction[6.15].

A particularly interesting variation of the cohousing concept is at Stroud Coflats<sup>9</sup>. The only development of its type in the UK, this development adapted the principles of cohousing to a condensed format of ‘coflats’ within a converted church building. The small size of the apartments means the project is only suitable for singles or couples, rather than families. The urban location has made the development popular for young and older residents. Unfortunately the project has been criticised for being overdeveloped. Apartment sizes are too small, and the common areas too small to serve any useful function [6.16]. This project was a speculative development by the instigator - there was no initial group formation, or resident consultation. The result is that the community does not mix as was intended and there are no common meals.

Despite the failure of the Stroud Coflats there

---

<sup>9</sup> Stroud Coflats are located in Stroud, Gloucestershire, UK

are successful examples of small apartments and flats in other cohousing models. Both the country house developments, and the high density Swedish apartment blocks show that a coflats concept could work more successfully. It will be important for the UK to further develop the concept of coflats as they are a good means to integrate cohousing into urban locations and areas of higher land value.

It would appear that it is too early to tell if cohousing in the UK will be any different to other examples abroad. Cohousing projects in the UK are predominantly private, as in the US and Denmark. The Netherlands has a mixture of private and socially rented cohousing, but with more socially rented units than private. Sweden is nearly all predominantly rental units.

Of the 15 established projects there is great variety in location, site, layout and design so it difficult to identify any particular trend. In the US there is a mixture of new build rural and suburban projects usually more dispersed on site. Denmark also tends to have a lower density development, but a more compact site plan than the US. The Netherlands has a mixture of high and low density developments and in Sweden the tendency is mainly for high density urban cohousing.



6.15: LILAC Cohousing, Leeds, West Yorkshire, UK  
*The contemporary prefabricated design of LILAC Cohousing using a straw bale and lime render system called 'ModCell'.*



6.16: Stroud Coflats, Stroud, Gloucestershire, UK  
*The common spaces are too small to serve any useful gathering space for residents.*

# Cohousing in The Netherlands, Denmark and Sweden

## Are the early experiments still working as intended?

### *Multigenerational Projects*

Most of the early cohousing projects were constructed during the late seventies and eighties. Senior cohousing was not developed until the late eighties.

In the Netherlands a number of the projects were designed with subdivisions or clusters in the community to make the group sizes more manageable. Not all projects are subdivided into clusters and instead some just have one set of communal facilities shared between all residents.

The group system still works in some projects but it is apparent that not all groups in a community are necessarily as cohesive as intended. At WKP (Woonkollektief Purmerend)<sup>10</sup> the resident who showed me around indicated that her own group common space was not used as the members of the group did not tend to use their group common space to cook or socialise [6.17].

Unfortunately WKP ran out of funds only five years after the project completion which forced the community to sell the main common space for the whole community. This means the community has no large indoor space to come together as a whole community, only the smaller common spaces in each cluster. WKP is a particularly interesting

project because the architecture attempts to provide two types of social crossover through the physical design and layout of the project [6.18]:

Each group is organised into something similar to a townhouse and contains three different types of accommodation. The ground floor is for a family so that the children have quick access to the garden, the first floor is for a mixture of young single adults and the top floor is intended for a professional couple or elderly resident. These three different types of household share the ground floor cluster or group common room.

There is also a second level of social crossover. Each level has an outdoor space such as the garden, a terrace and the roof terrace. These terraces are interlinked with the neighbouring properties. This allows residents of similar types - i.e families, single young people, older adults or professionals without children to share the same outdoor space.

The outcome is that there is a vertical stratification to mix up these different resident types and a horizontal stratification to allow similar resident types to mix.

When I visited the ground floor was still predominated with families, and children were making good use of the garden [6.19]. The top floor was used mainly by older residents who shared the entire upper terrace and it functioned as an important social space [6.20].

Another observation about WKP was that it was common for residents to move to different apartments within the community. This allowed a great level of flexibility so that as their life circumstances changed, such as having children or gaining or losing a partner, residents managed to swap or move as an apartment became available. WKP consists entirely of socially rented properties

<sup>10</sup> Woonkollektief Purmerend is located in Purmerend, The Netherlands



6.17 Cluster group common space at Woonkollektief Purmerend  
*Some groups used their common space more than others.*



6.18 Multigenerational crossover at Woonkollektief Purmerend  
*The oldest resident holding the youngest resident.*



6.19 Central garden space at Woonkollektief Purmerend  
*The central garden provides a popular and varied play area for children.*



6.20 Rooftop terrace at Woonkollektief Purmerend  
*The rooftop terrace at WKP provides a different social environment from the central garden.*



6.21 Exterior view of Centraal Wonen Delft  
*Different colours represent different clusters.*

which makes the process a lot easier than if the apartments were individually owned.

There are also a small number of cohousing projects which were built with a different structure. Centraal Wonen Delft originally provided two types of accommodation: family houses with small kitchenettes and houses designed to be shared by singles or couples. There is a mixture of these houses per cluster, and each cluster shares a common living and kitchen area in addition to the kitchenette and bathroom in each household [6.21].

In 1981, when the original group moved in, there was a mixture of all ages including old and young. Three decades later the entire community is now predominantly younger adults, either single or in couples, between the ages of 20 and 40. Why has this happened?



6.22 Central circulation within a 'household' at Centraal Wonen Delft  
*One floor of a typical apartment. In this case the resident used all of the rooms on this floor - a living room, a bedroom, and a child's bedroom.*

Centraal Wonen Delft<sup>11</sup> is designed in such a way that any of the rooms can function as a bedroom or living space. Most single tenants will each rent two rooms so they can each have a living room and a bedroom. This provides a high level of flexibility - residents who want to save money or have a change in circumstances can rent just a single room, and residents requiring more space can rent an additional room [6.22]. The problem was that the family households were, in many cases, let as shared housing for singles and couples. Over time this meant that all of the family units were fragmented and fewer and fewer families replaced those who left.

This shows the importance of reserving the correct house type for the correct resident type. This is an example where the housing association did not realise the importance of tenant selection. It is difficult to know whether if the building had been

<sup>11</sup> Centraal Wonen Delft is located in Delft, The Netherlands



*The common area for the overall community.*



*A common area for a cluster. A shared kitchen can be seen through the far window.*



*View from inside another cluster common area. Note the high level of glazing to allow a good level of visual connectivity with other parts of the project.*



*View from within a kitchen out to the other common area*

6.23 Images of Centraal Wonen Delft

managed differently a more balanced demographic model could have been maintained. Perhaps the concept of shared kitchens may have been less popular with families and older residents, despite each household having a kitchenette.

The younger residents enjoyed living in this project - it was affordable and social. One of the residents who showed me around explained that his girlfriend lived in a different cluster. This was good because they each had their own space and different social groups, but it was easy to see each other. I also met another resident who had broken up with her boyfriend and explained that it was easy for one person to move out and for the two rooms to be rented by someone else [6.23].

The housing association for Centraal Wonen Klopvaart was originally built with kitchenless living spaces. Each cluster was expected to use the group kitchen on the ground floor. The housing association for this project was very relaxed and allowed residents to make changes to their personal living spaces as long as they returned them back to their original condition when they left the property.

Over time some residents had installed kitchens in their living spaces. This had led to a gradual breakdown of some of the cluster kitchen/living spaces which were unused. In other units which still consisted of the original kitchenless common spaces the cluster kitchen/living spaces were well used.

Perhaps these examples indicate that there is a potential demand for a different type of housing for young professionals which offers affordability, flexibility and a social environment.

Centraal Wonen Klopvaart also had a main common space equipped with a full kitchen. The layout of the common space meant it could only be



6.24 Centraal Wonen Klopvaart, Utrecht, The Netherlands  
*The common space can only be accessed externally and access requires a key and the curtains are kept drawn for security. These factors have a negative influence on the use of the space.*



6.25 Centraal Wonen Klopvaart, Utrecht, The Netherlands  
*Inside the common house.*

accessed from the outside [6.24,6.25]. This door had to be kept locked, which discouraged people from casually dropping in to use the space.

Centraal Wonen Houtwijk is an example of a community which started with the cluster group system, but has since gone back to a flatter level of hierarchy. The community suggested that this arrangement puts less pressure on groups, and allows people to mix with a greater variety of people at the main meals.

Although some projects have since removed the sub group level in the community organisation, it still exists and functions well at Centraal Wonen Hilversum - the first centraal wonen project to be completed in the Netherlands. It was also apparent here that some groups interacted more so than others which was often evident from the varying condition of the cluster common spaces.

It was also noticeable that some projects had large amounts of common space (because the cohousing group had started in the initial years with lots of energy and lots of group interactions to get the community going) which were no longer effectively used. Over the years as the group becomes more established and used to one another, there are not as many common events and subsequently there is less need for the amount of common space. This was apparent at Centraal Wonen Houtwijk which had a large number of common rooms some of which were under-utilised [6.26].

Some common spaces were poorly designed. They did not provide enough enclosure or suitable quality of environment and subsequently were not used effectively. Examples of this were at Centraal Wonen Drielandenhuis and Centraal Wonen Romolenpolder<sup>12</sup> [6.27]. Many of the common

<sup>12</sup> Centraal Wonen Drielandenhuis and Centraal Wonen Romolenpolder are located in Haarlem, The Netherlands



6.26 Centraal Wonen Houtwijk, Den Haag, The Netherlands  
*Any resident can take used clothes from this room in a similar way to a charity shop. The room is not used often and can be considered under utilised.*



6.27 Centraal Wonen, Romolenpolder, Haarlem, The Netherlands  
*A lack of enclosure, odd spatial arrangement and a poor quality of finishes make this space difficult for the residents to use effectively.*

spaces in the earlier projects were also in need of refurbishment but often this investment was left to the housing associations. Here it was considered that a modest investment could make a big difference to the common spaces, particularly as most of the labour could be undertaken by the community.

Having a shared vision or common aim is also something which appears to help strengthen a community. Many of the earlier projects were built with a limited budget and have been continuously tweaked and improved by the residents over the decades. Having unfinished jobs for the community to do brings people together. A good example of this is at Bofællesskab Jernstøberiet. The community purchased a disused iron foundry and converted it into a cohousing project. The retrofit project and low initial budget of the community has meant that many improvements have been made gradually over time [6.28,6.29]. One of the residents showing me around, Anna, explained the important for the community to always have something to work towards.

A good example of a different cohousing variation with a shared vision is at Woongroep Lavendelstraat. The community focuses on providing light support for up to six vulnerable people at a time. This variation of Centraal Wonen is reflected in the architecture. The community consists of twelve 3 to 5 bedroom homes and six single apartments for the temporary residents in which a resident can stay for up to four years. These temporary apartments are each suitable for a single resident and priority is given to people who are in need of a supportive social environment - for example a person who has recently been divorced, recovering from a serious incident in their life or has experienced some form of hardship. Centraal Wonen Lavendelstraat is fairly unique but it shows how cohousing can provide a

supportive environment to more vulnerable people [6.30-31].

Many of the earlier projects were somewhat more experimental than more recent projects. These projects still provide high quality environments in which to live, and more than four decades after completion they show that a cohousing community can survive long term. These projects also show that the architecture and selection of new tenants can have a significant impact on the community and the age range it will attract.

## **How do cohousing communities deal with the turnover of occupants?**

Many of the earlier projects have been around long enough that some of the older residents have left the community as their needs change.

The most common trend in multigenerational cohousing is that the original families, many of whom started with the project, are now senior couples and their children have moved out.

This creates the issue that there are too many old people and not enough young people. Many projects had a level of self-promotion to ensure a good public image.

Some groups had long waiting lists and the luxury of a range of tenants available. Other projects did not have such varied waiting lists. In these cases it was important for one of the community work groups to consider resident recruitment to ensure that suitable tenants were found for upcoming vacant properties. It is vital that the cohousing group retains the right to select new tenants. In privately-owned cohousing the owner of an individual house might sell to the



6.28 Bofællesskab Jernstøberiet, Roskilde, Denmark  
*Image showing the existing foundry building prior to the conversion.*



6.29 Bofællesskab Jernstøberiet, Roskilde, Denmark  
*The outdoor deck, an example of a community project. These projects improve the physical environment over time, but are also important for building bonds within the community.*



6.30 Centraal Wonen Lavendelstraat, Haarlem, The Netherlands  
*An architectural model of the community used during the design stage.*



6.31 Centraal Wonen Lavendelstraat, Haarlem, The Netherlands  
*The internal street with social space, community notices and children's toys.*

highest bidder, rather than the most suitable buyer. Similarly a housing association is under pressure to fill vacant properties and will be keen to let a property as soon as possible. This presents the risk that a tenant may move in for reasons such as a desirable location, property availability or low rents, rather than an interest in the community.

At Centraal Wonen Karel Doormanhof it was apparent that new tenants had been selected by the housing association, and many of them had no interest in the cohousing community. Over a period of time this has destabilised the group and had a irreversible negative impact on the cohousing community as a whole [6.32].

It was also interesting to note that in many cases a new influx of residents often happens in waves. There were several groups which at one point feared that their community would have no young energy in the community. Bofællesskab Jernstøberiet explained how a number of young families had recently moved into the project. A sudden influx of too many people can affect the community's integrity but in this example the community appears to have adapted well. It also shows that a community can, in some circumstances, rebalance itself in a relatively short period of time.

It is therefore important that common facilities remain attractive to younger families or adults. In some cohousing projects the common spaces have a tendency to adapt as the community ages, which means these projects become less attractive to younger adults.

An example of this was at Kollektivhus Dunderbacken. The senior community came to realise that if they wanted to attract younger families it would be difficult to provide suitable spaces such as a children's play room unless they sacrificed an existing common room [6.33].



6.32 Centraal Wonen Karel Doormanhof, Vlaardingen, The Netherlands

*The rear garden.*



6.33 Kollektivhus Dunderbacken, Stockholm, Sweden

*This project was designed for seniors, but the residents are now considering allowing families to move in. If a children's room is to be integrated it will mean the residents will need to sacrifice an existing common room.*

This is also the case in senior projects - common spaces need to attract the 50-year old demographic, but may have become adapted to the cultural expectations of an 80-year old demographic.

Many of the senior projects were successfully recruiting younger adults as older adults died of old age or moved to specialist care. The atmosphere of projects varied considerably. Kollektivhusföreningen Färdknäppen is a centrally located senior cohousing project in Stockholm [6.34]. The central urban location makes the project extremely desirable and they have a long waiting list. New residents are as young as 45 and the urban location gives the project a very lively atmosphere.

Many examples of senior cohousing show that this model can work. It will be interesting to see how many of these projects are progressing in another 30 years. Some smaller projects may have more difficulty in attracting younger tenants as older residents move out. Woonvereniging Voormekaar features beautiful common spaces but consists of only 12 households [6.35]. The residents are of a similar age range and it will be interesting to see how the community deals with its age balance at a later stage.

Occupant turnover in cohousing is an important consideration. It is necessary to try and maintain a balanced age demographic and ensure the cohousing community always retains the ability to select new tenants. It is therefore important in privately owned projects to establish legal agreements from the outset covering cooperative ownership arrangements and in rental projects that the housing association fully understands the importance of allowing the community to select new residents. In the long run this will work to the housing association's benefit because a successful community will be a fully-let community.



6.34 Kollektivhusföreningen Färdknäppen, Stockholm, Sweden  
*This project is centrally located in a highly desirable area of Stockholm.*



6.35 Woonvereniging Voormekaar, Boxmeer, The Netherlands  
*This senior cohousing project consists of only twelve households.*

Generally the experiences of senior projects based on the site visits show that senior cohousing can survive long term and successfully integrate and attract younger adults into the community.

## How well do the European senior cohousing schemes work?

The most important element in any senior cohousing community is the community itself, but it is also interesting to consider the role design can play in facilitating the interactions between residents. Many of these interactions are subtle: collecting the post, collecting laundry, walking to the front door are all examples of daily activities which create opportunities for casual interactions between neighbours. These interactions will be influenced by human environmental and behavioural psychology, spatial arrangement, the quality of the environment and visual connectivity between spaces.

Although there is a large number of woongroep projects in the Netherlands only some of these are purpose-built. Many are retrofitted existing apartment buildings. In many of these projects the design was essentially the same as a typical apartment building, but with a common space on the ground floor. Often the common space lacked any kind of visual connection with the rest of the project and in some cases appeared spatially disconnected from the project as a whole - in these cases the common space is under-utilised as it tends to be used only for prearranged events. There are fewer opportunities for spontaneous interaction which can be considered as important as organised events.

In a number of woongroep projects I cannot help but feel that such design aspects have been overlooked and I am hesitant to suggest that this

is purely due to budget constraints. Perhaps instead it is down to the vision and experience of the individual architects, project managers and housing associations involved and the degree of client consultation which has taken place.

There were some examples of projects where design did make a difference. Both Woongroep Lugtensteyn located and Woongemeenschap Kwackershof are social housing projects with a limited budget but they benefit from a covered atrium [6.36-37]. This central area allows circulation space to provide a place for activity with views to other parts of the project. Woongroep Lugtensteyn also has a common room which consists of an elevated glass cube. This not only expresses the importance of this common space architecturally but also provides residents with a two-way visual connection to other common spaces.

One of most successful example of circulation space combined with common space is the internal central garden of Woongemeenschap Kwackershof [6.38,6.39]. The location, scale, planting and community input from the residents make this a really beautiful, functional space. The quality of this environment acts as a magnet for different kinds of activity. In this case the circulation space appears to be better utilised than the more secluded common room on the ground floor. Whilst I was visiting residents were having conversations across different floor levels, a group of residents was doing a jigsaw puzzle on a table and a resident was using gym equipment. These are all activities which could take place anywhere, but because this shared space is a place the residents want to be, it brings people together.

Woongroep Het Kwartel<sup>13</sup> and Woonvereniging Voormekaar<sup>14</sup> are two privately-funded projects

<sup>13</sup> Woongroep Het Kwartel is located in Culemborg, The Netherlands

<sup>14</sup> Woonvereniging Voormekaar is located in Bosmeer, The Netherlands



6.36 Woongroep Lugtensteyn, Bilthoven, The Netherlands  
*The central space, although unheated provides a large amount of additional common space which is an attractive area to stop and chat with neighbours.*



6.37 Woongroep Lugtensteyn, Bilthoven, The Netherlands  
*The importance of the main common space is indicated in the architectural design which features a high level of glazing.*



6.38 Woongroep Kwackershof, Enkhuizen The Netherlands  
*The central space hosts a range of different activities and interactions.*



6.39 Woongroep Kwackershof, Enkhuizen The Netherlands  
*Looking down on a group of residents doing a jigsaw puzzle, from an upper circulation walkway.*

which also feature some interesting architectural design features.

Woongroep Het Kwartel benefits from exposed timber detailing which, combined with plenty of glazing, provides light airy circulation spaces. This means neighbours are more inclined to stop and chat whilst walking to their front door. The common space has a number of windows specifically located to allow passers-by to glance in, and the arrangement of furniture provides a domestic feeling. This can be easily reconfigured to facilitate larger gatherings for special events. I was also interested to see how the laundry room was located adjacent to the common space allowing residents to chat in the common room whilst waiting for a machine to finish its cycle [6.40]. Some consideration has also gone into the architectural language of the building which distinguishes the residential accommodation and common space with a different materiality [6.41].

Woonvereniging Voormekaar consists of just twelve residential apartments but benefits from a generous provision of high quality common spaces, the most spectacular of which is the main common house constructed with plate glass. This is a flexible space, which can comfortably accommodate different group sizes, from a few people drinking coffee together, to large events of over fifty people. The mixture of different furniture, and quality of the internal finishes creates a domestic feeling in a similar way to the common room at Woongroep Het Kwartel. One of the residents, Veronica, explained how the coffee machine in the common space was better than the ones in the individual apartments - this was another example of a pull factor for residents to use this space.

Woongroeps are often considered to be senior cohousing, yet many of these projects have only a common room with a small kitchen for refreshments.



6.40 Woongroep Het Kwartel, Culemborg, The Netherlands  
*The laundry room is well connected to the main social space allowing residents to chat to others or wait in a comfortable environment while they wait.*



6.41 Woongroep Het Kwartel, Culemborg, The Netherlands  
*The main approach to the community. The difference in materiality can be seen between the residential units (in timber to the right) and the common space (in brick to the left)*

A much smaller percentage have better equipped kitchens and the residents eat regular meals together - something considered to be a fundamental feature of cohousing.

In Denmark and Sweden there are fewer senior cohousing projects, although these generally have a range of common areas and fully equipped kitchens.

Projects in Denmark often had a distinctive architectural design. (It should be noted that the same architectural firm Vandkunsten involved in the design of some of the earliest projects have designed many of the projects in Denmark.) An example of such a project is Seniorbofællesskabet Egebakken which has received careful design attention [6.42].

Sweden has made great progress in experimenting with different models of senior cohousing, most of which are in high density urban locations. Kollektivhusföreningen Färdknäppen was the first senior cohousing project in Sweden, and it is still considered to have one of the most successful common space layouts [6.43].

Later projects have tried a combination of multigenerational cohousing and serviced apartments for the elderly. The principle of this was to create a bigger economic base to allow a greater range of communal facilities and create an age-integrated environment. On paper the principles appear to be a good idea, but in reality this did not work as intended. Older residents requiring the serviced accommodation were too elderly or infirm to participate in common activities. The serviced apartments also required a staffed kitchen, whereas the younger adults were happy to cook communally. A key problem with the design of these projects was the physical separation of the serviced building with the multigenerational building. Many of the older residents refused to move into the serviced building



6.42 Seniorbofællesskabet Egebakken, Nødebo, Denmark  
*Both the housing and the common house make a bold architectural statement.*



6.43 Kollektivhusföreningen Färdknäppen, Stockholm, Sweden  
*Common spaces are well connected both physically and visually.*

as they refused to accept they had progressed to this level of infirmity.

Lessons from this project suggest that the proposed Baltic Wharf Cohousing in Totnes, Devon, in the UK would not have worked. This project attempted to create an age-integrated society by locating an old people's home adjacent to a cohousing community. (The Baltic Wharf Cohousing scheme was shelved as it did not attract enough interest due to the high cost of the houses.)

A later project, Kollektivhuset Stolplyckan<sup>15</sup>, better integrated the service element with the non-service element. This project has the benefit of a great range of common facilities but most importantly helps older adults transition through the 'decline' stage of old age whilst remaining in their community for as long as possible.

Projects of this type require a greater level of planning and integration with public health services and the assistance of a housing association. They may also require a larger scale - Stolplyckan consists of 184 apartments, whereas a more typical cohousing project would consist of between 20 and 30 apartments. There is a question of whether the scale of the project would affect the community, although the project uses subdivision clusters to allow a more suitable group size.

The issue of death is not so significant - it is the decline stage of old age which is perhaps the most difficult problem for our society to solve. The number of people with Alzheimer's disease, dementia and other such issues is a real problem.

---

15 Kollektivhuset Stolplyckan is located in Linköping, Sweden

One of the projects I visited had encountered serious difficulties with an older resident. In this instance it became difficult for the cohousing community to support her and eventually she had to be moved to a dedicated care facility.

In other projects residents who were starting to lose their faculties were given simple tasks and were checked on by members of the community. At Centraal Wonen Hilversum one of the oldest residents had the task of ringing the meal bell and assisting with food preparation. At Woongroep Senioren Wendakker a resident with dementia took great pleasure in caring for the plants [6.44].

There were several couples where one partner had dementia. In this scenario having the social support of the community helped, although as the disease progressed it was expected that these residents would be required to relocate.

The Netherlands has some of the most advanced Dementia care in the world. Whilst in the Netherlands I visited the Hodgeway Dementia Care Centre in Weesp which pioneers dementia care through personal care and design. The most important question raised in the design was how to provide care for a degenerative illness whilst allowing the patient to remain part of society. Part of the solution appears to be the need for overlapping community functions in a supportive environment which is safe, but not isolated or separated from society. This is a difficult challenge. The closest example to this is possibly De Rokade which connects multigenerational accommodation with Maartenshof<sup>16</sup> a large community care facility

---

16 De Rokade and Maartenshof are located in Groningen, The Netherlands

6.44 Woongroep Senioren Wendakker, Amersfoort, The Netherlands  
*View of the internal street. A different apartment is located on each level.*



with treatment centres, public community facilities, common spaces and a nursery [6.55]. The residents of De Rokade and surrounding community use the social and community facilities in Maartenshof in the same way as the more vulnerable residents. This project, whilst not cohousing, does provide the most overlap between different users [6.56]. Perhaps a future development could combine this arrangement with cohousing?

It is important to highlight that there is sometimes a grey area between what would be considered temporary support, and anything longer term. This can be difficult for some cohousing communities. When a resident of a cohousing community expects greater levels of support what happens? In the Netherlands there is a social policy known as Umbrella Care which places pressure on family and neighbours to take some responsibility for caring for older people. Woongroep Castellum<sup>17</sup> explained it would refuse prospective tenants with age-related degenerative illnesses as over time this may place too much pressure on the community. These difficult transitions call for a greater need for further service/residential combination projects to be developed.

There is still a stigma attached to some senior cohousing projects. A number of residents in both multigenerational and senior cohousing said that they knew people who did not consider themselves old enough to live in a senior cohousing project. In reality many senior cohousing projects have a broad age range but there is still a negative perception that it is a place for 'old people' and a 'place to die'.

In conclusion, many of the European examples of senior cohousing function well, and have existed long enough to have survived the test of time. We can conclude that design can add significant

value to a project and that there are still problems to overcome in the last stages of life. Perhaps we should be asking if there is any way the later stages of life can be better accommodated in cohousing?

## **What is different about this part of Europe which makes senior cohousing more popular?**

Whilst senior cohousing is more common in The Netherlands, Denmark and Sweden than it is in the UK it is important to highlight that senior cohousing and even multigenerational cohousing is still not a common housing model. There are many Dutch, Danish and Swedish people not associated with cohousing, who have no idea what it is.

One difference is cultural attitude. The Dutch elderly are well voiced with strong lobbying groups and this has led to a more positive association with ageing than in the UK. Also some countries are used to sharing common facilities. For example in Sweden common laundry is standard in most apartment buildings. There is even a Swedish in-joke about 'laundry conversations' or 'laundry arguments' [6.57]. In the UK we are more like the US in our expectation of private individual ownership.

Another difference is the way housing is developed and owned. Many cohousing projects, particularly in the Netherlands and Sweden, are rented by housing associations and have had support from local authorities and political parties. Projects managed by housing associations have fewer problems associated with finance and this can result in a quicker project completion date. It is important to note that this is not always the case. Some groups get frustrated with the bureaucracy involved with

---

<sup>17</sup> Woongroep Castellum is located in Amersfoort, The Netherlands



*The dementia care centre, is essentially a small town with its own restaurant, supermarket, hairdressers and theatre.*

6.55 Hodgeway Dementia Care Centre, Weesp, The Netherlands



*Many facilities such as the restaurant can be used by surrounding residents. The idea is to overlap as many spaces as possible with the external environment, whilst maintaining a safe protective environment for the residents.*



*The centre of the facility boasts a range of activities including dining, a nursery, a gym, a hairdresser, a library, a market and more.*

6.56 Maartenshof, Groningen, The Netherlands



*A market comes to the centre once a week. The centre is open to the public and is well used by the surrounding community.*

housing associations and in some cases have decided to develop projects privately as a result.

The provision of social housing is also different to the UK. Cohousing developed and rented by housing associations enables lower income households to live in cohousing projects. Privately owned projects which currently predominate in the UK, US and Denmark often exclude lower income groups.

Despite these differences to the UK, it is important to recognise that cohousing is still not a simple process for groups even in more socialist countries. Local authorities and housing associations have experienced the same need for budget cuts and efficiency savings as the UK. There are now fewer resources available to help groups find sites and fund group consultation. This risks further separating the end user from the designer and this can affect the quality of the design. Housing associations also have less money to spend on common areas which may impact on their size or suitability for purpose.

It could be argued that although cohousing developed slightly differently in The Netherlands, Denmark and Sweden, there is generally a greater cultural crossover with surrounding nations. For example, the concept of cohousing is also popular in adjacent countries such as Germany and Belgium. The fact the UK is on an island may have resulted in fewer cross border dissemination of housing ideas.



*The communal laundry facilities are located in the centre of the development*



*Residents meet in the laundry room*



*The laundry overlooks the children's play area so parents can keep an eye on their children whilst they sort the washing.*



*The advantage of collective laundry facilities in Sweden is that they are free to use, and feature high end commercial washing machines, and dryers.*

## Cohousing in the US

As with other countries, cohousing in the US is still far from being a mainstream model of housing and currently makes up a minute proportion of the total housing market. It is still therefore difficult to suggest that cohousing is a housing revolution. Despite this, there is a rapid increase in popularity of cohousing and the number of completed projects.

The US has over 125 multigenerational projects and around 20 currently under construction. The US now constructs more cohousing projects than anywhere else in the world which makes it an interesting place to observe new design ideas and architectural developments in cohousing. Climatic and cultural differences across the US result in a great deal of site variety and the easy availability of land has allowed a greater number of projects to be completely new build enabling a high level of design flexibility.

The difference between Cohousing and traditional housing is even more marked in the US than in Europe. Car dependency in the US means neighbourhoods are traditionally more segregated from community hubs. Furthermore there is a tendency for Americans to aspire to the American dream house: the suburban dwelling, separate from other houses in its own plot of land. While the UK also has a history of privacy in the home, our lack of available land and early speculative housing developments resulted in the popularity of the terraced house. In the US, it is common for entire neighbourhoods to consist of individually separated detached houses.

As in the UK, the housing market in the US is mainly privatised with less provision for social rented housing. Most of the projects visited were privately funded and were generally exclusive to those who

have enough equity to invest in purchasing their apartment and portion of the common space. However, the US is starting to find ways to make cohousing more affordable. One option is to establish a partnership with a local public housing authority as in the case of the development of Wild Sage Cohousing<sup>18</sup>. An alternative method is to work with a non-profit housing developer as in the development of Petaluma Avenue Homes<sup>19</sup>, a cohousing project which comprises affordable rental homes.

The appearance of the buildings is distinctly different to European projects. Many of the projects resemble American timber colonial architecture, but this varies depending on location [6.58-59]. There is also a number of different site arrangements in the US, mainly as a result of the greater availability of space and new build nature of the projects.

Nearly all of the cohousing projects in the US had large basement spaces. (This appears to be a standard expectation of housing in the US.) These basements were useful for storage, but in many cases had been adapted to be common spaces. The success of using basement space as common space is questionable: the lack of windows and natural light significantly hampered the quality of the environment [6.60-61].

There was also a notable difference between urban projects and rural projects. Many of the urban projects generally had less attendance at meals, due to the proximity to other cultural facilities, friends living nearby or residents staying at work, whereas rural projects were more reliant on the cohousing community.

The US only has five senior projects but more are in the planning stage. I visited three projects: Elderspirit, Silver Sage Cohousing and Sand River Cohousing.

<sup>18</sup> Wild Sage Cohousing is located in Boulder, Colorado, USA

<sup>19</sup> Petaluma Avenue Homes is located in Sebastopol, California, USA



6.58 Pioneer Valley Cohousing, Amherst, Massachusetts, USA  
*This community features typical US rural architecture.*



6.59 Harmony Village Cohousing, Golden, Colorado, USA  
*Harmony Village is constructed in the adobe style.*



6.60 Camelot Cohousing, Berlin, Massachusetts, USA  
*Basement common rooms with no natural lighting.*



6.61 Shadowlake Village Cohousing, Blacksburg, Virginia, USA  
*An internal cinema room with no external lighting or natural ventilation.*

Elderspirit was the first project in the US and the development was driven by a key visionary, Dene Peterson. The project has a spiritual focus and is inclusive to members of all faith groups. The quality of the project has been hampered a little by the poor quality of the architectural design. Key spaces such as the kitchen, dining area and recreation room have no visual connection and the kitchen and recreation room have no windows. This means these spaces are rarely used other than for arranged events (rather than spontaneous meetings) [6.62-63].

Silver Sage Cohousing located in Boulder, Colorado, had a higher budget and benefitted from the experience of the architects. This project is adjacent to the multigenerational cohousing project, Wild Sage. Silver Sage is a relatively small cohousing community and the main common spaces are scaled accordingly, providing a pleasant domestic quality. The common house is combined with a workspace used by one of the residents. The residents did suggest that the design was better suited to a warmer Californian climate rather than the Colorado climate: access around the site can be difficult in the winter [6.64].

Sand River Cohousing used to be called Eldergrace, but it changed its name to avoid negative assumptions based on age perceptions. The climate in New Mexico is dry which negates the need for internal corridors. Subsequently the project consists of rows of single storey housing with a separate common house in the centre [6.65].

All of these projects appeared to be working well with a cohesive community, and a waiting list for new residents.



6.62 Elderspirit, Bristol, Virginia, USA  
*The approach to the common house.*



6.63 Elderspirit, Bristol, Virginia, USA  
*The main social function room has no external windows, meaning it has no natural light and a lack of natural ventilation.*



6.64 Silver Sage Cohousing, Boulder, Colorado, USA  
*The external circulation causes problems in the cold Colorado winter climate where frost is common.*



6.65 Sand River Cohousing, Santa Fe, New Mexico  
*The common house is to the right with the photo voltaic panels on the roof.*

# Design Observations

## New Build or Retrofit

Most of the projects visited were new build. It is important to consider that some future cohousing projects are likely to be retrofit projects due to a lack of greenfield sites. The following are some considerations of retrofit options:

### *Existing apartment building or large house*

There are three ways a cohousing community can convert an existing apartment building:

- The cohousing community can use the entire building if it is an appropriate size.
- If the building is too large or already occupied with a mixture of tenants, a cohousing community can be dispersed in apartments throughout the building (known as the *Stippel Model*) [6.66].
- The cohousing community can be located in apartments grouped on the same floor or wing of the building (known as the *Harmonica Model*) [6.67].

### *Country Houses*

Country houses convert well as there is usually some form of hall or large ground floor rooms with a scale suitable for common spaces. Depending on the layout, the close proximity of apartments means that neighbours are likely to meet more so than on a dispersed site with separate buildings [6.68].

### *Industrial buildings*

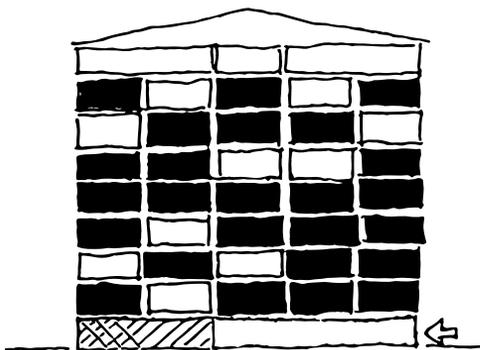
The location of industrial buildings vary considerably and the site may be expensive to convert depending on the previous use. Sometimes the previous use of a building can lead to interesting design proposals - architects like to turn constraints into opportunities. This can lead to new ideas and spaces which would not necessarily have been considered in a new project. Bofællesskab Jernstøberiet is a good example of this. In this project an old iron foundry has been converted to cohousing and this has resulted in a unique arrangement of common space. Such an arrangement may not have been considered by the designer or financially possible in a new build project [6.69].

### *Retrofit of a suburb*

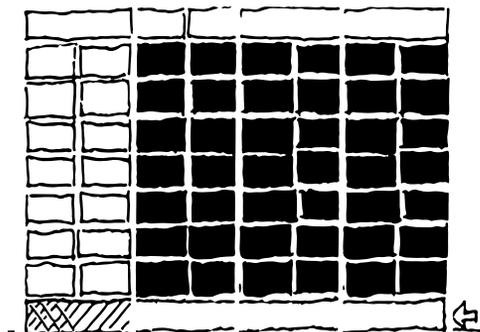
Some cohousing has been made possible by constructing a common house, or using an existing house as a common house on a typical residential street.

In the US N-Street cohousing is an example where over a period of 30 years a developing cohousing community has gradually expanded. It started with a single co-op house and eventually managed to convert the entire neighbourhood into cohousing. The fences were taken down between units, and one of the houses is used as the common house.

This was only possible because the other houses in the neighbourhood were in a student area and owned by landlords renting the properties. It is probable that these landlords were less attached to these rental properties than a private owner might have been, and subsequently less reluctant to sell to the cohousing group. In a neighbourhood which was all privately owned this would be difficult to achieve even over a long period of time making this a less viable option for the UK.



6.66 The Stoppel Model  
*Apartments dispersed between non-cobousing residences within a building.*  
 (Image: Dorit Fromm)



6.67 The Harmonica Model  
*Cobousing apartments grouped on the same floor or wing of a building*  
 (Image: Dorit Fromm)



6.68 Postlip Community, Winchcombe, Gloucestershire  
*The community makes use of a Jacobean country manor house, a medieval Tithe Barn, and a chapel.*



6.69 Bofællesskab Jernstøberiet, Roskilde, Denmark  
*This community has converted a disused iron foundry. The main hall has provided some interesting and highly functional common spaces.*

## Different levels of community

Some cohousing projects are focussed towards more group interaction, whereas others are more private - these are both factors in which the architecture can play a vital function. These different types of projects can be summarised into four categories:

### *Type 1 (More communal)*

Projects most focussed on group living with shared kitchens, usually between three to eight people. An example of such a project is Woongroep Fultonia where kitchens and bathrooms are shared between up to three residents but each resident has their own private living room and bedroom [6.70]. Some of these projects have quite advanced configurations providing different living accommodation for different resident types. In these projects young singles or couples have shared kitchens, while apartments designed for families have more privacy and feature their own kitchen as at Centraal Wonen Delft.

### *Type 2*

Projects which still utilise the principle of clusters providing a communal kitchen and living space but each apartment is completely autonomous with its own kitchen. Centraal Wonen De Hilversum is a typical example of this. As a resident you have your own apartment, but also have an intermediate cluster common space shared with the other five residential units. There is also a series of central common spaces shared by the whole project of around 50 residential units. At Hilversum each cluster has a mixture of accommodation units varying in size and design for different resident types such as families, single adults, elderly, etc. Clusters can also be used to group together similar types of residents. There are advantages and disadvantages of both options [6.80].

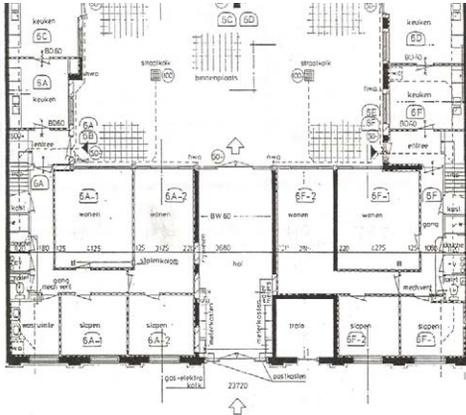
### *Type 3*

Some projects have completely autonomous accommodation units, just like a normal house, where there is no subdivision of residents into a cluster or intermediate group arrangement so all common facilities in the project are shared by all the residents. This model appears to be the most common, particularly in more modern projects and, from my experience, in the UK and US. An example of this type of project in the Netherlands is Centraal Wonen Hof van Heden in Hoogvilet where there is no subdivision or cluster system, simply a central common house shared by all residents [6.90].

### *Type 4 (least communal)*

Projects with the most private arrangement usually consist of a typical apartment block with a common room on the ground floor. An example of this type of senior woongroep arrangement is Woongroep Castellum in Amersfoort [6.91]. Some projects have a room with a functioning kitchen, while some only have tea/coffee facilities.

It is worth mentioning that there is also a project type which is essentially a normal residential development with no specially designed or designated common space. In these cases, usually a normal residential unit is converted into a common space and shared by a number of the building residents. Less focus has been placed on these projects as there is less potential for the architectural design to make a difference: the physical building has not been designed or planned as cohousing or a woongroep from the outset.



6.70 Woongroep Fultonia, Den Haag, The Netherlands  
 Each resident has a bedroom and a living room, and shares a kitchen with 3-4 other residents. There is also a larger common space for the whole community.



6.80 Centraal Wonen Hilversum, Hilversum, The Netherlands  
 A cluster consisting of five different residential units sharing a common kitchen/living space and roof terrace (in addition to their own private spaces).



6.90 Centraal Wonen Hof van Heden, Hoogvilet, The Netherlands  
 The common house can be seen in the top left of the image. The other centrally located building is a bicycle store.



6.91 Woongroep Castellum, Amersfoort, The Netherlands  
 This common space only has a small kitchenette for light refreshments rather than common dining.

## Different site arrangements

The following typologies are loose categories based on the sites visited. (There are likely to be further arrangements in other communities.). Several projects differ from these groups and some projects may be a combination of these typologies.

### *Contained single building with ground floor common facilities*

This is the most typical arrangement in Sweden. The main common facilities are located on the ground floor of an apartment building. Depending on the layout and number of entrances, a higher density on site generally leads to a higher footfall through the common spaces which can increase opportunities for spontaneous interaction. This arrangement can also make the common space easier to contain in an urban area. The space is secure and well-defined which means that parents know that young children playing within the building will be safe.

### *Towers linked by common space*

This is similar to the previous option; however instead of a single building, the common facilities are used as a connecting element between the different residential blocks [6.92].

### *Enclosed or part-enclosed central space*

A number of projects form an enclosure around a central space, usually defining a shared space by the community.

Some projects enclose the common space which creates a private garden or courtyard in the centre. This can be a good way to define the boundaries of the community but can also create give an impression of a fortress-like community. Bofællesskab Lange Eng creates an dark enclosure to the community which may appear somewhat

imposing to surrounding residences despite the fact the project is not a gated community [6.93]. Other projects appear to reach out more so to the local community, but have no large private enclosure. There is not necessarily a right or wrong option as both have advantages and disadvantages.

### *Street and the square*

One or several streets run through the development and are used to reach the main common areas. In this arrangement the positioning of the common house can have some impact on the group as was found at Bofællesskab Jystrup Savværk. In this project the common house is centrally located, but was found to unintentionally divide the community into two different groups. This is not seen as a problem, but it is interesting that this arrangement has influenced the community in such a way [6.94-95].

## Different vertical arrangements

It is also important to consider the vertical connection and distribution of spaces. Some projects only have common spaces on the ground floor. Other projects distribute common spaces on different levels throughout the building. Common spaces need to be as easy to access as possible and ideally be part of the daily journey to one's apartment or house.

Several projects had rooftop terraces, but in nearly all cases these were only regularly used by apartments on the top floor or adjacent to the terraces. Some projects also had communal balconies accessed via the central stairwell. These were usually provided to satisfy fire safety regulations and although pleasant spaces they were never used by residents as in these cases apartments had their own balcony.



6.92 Kollektivhus Prästgårdshagen, Älvsjö, Sweden  
*The common space at Prästgårdshagen consists of the lower-ground floors of each residential tower, and a connecting link as shown in the image. All residents entering the building pass through this space.*



6.93 Bofællesskab Lange Eng, Albertslund, Denmark  
*The inner garden is a contrast to the dark exterior of the community. This provides a real focus to the community and an excellent place for children to play.*



6.94 Bofællesskab Jystrup Savværk, Jystrup, Denmark  
*The community is formed in an L-shape with the common house at the corner between the two streets.*



6.95 Bofællesskab Jystrup Savværk, Jystrup, Denmark  
*One of the streets in Jystrup Savværk. This provides a safe place for children to play and a meeting place for residents all year round.*

More successful examples of communal roof terraces were at Woonkollektief Purmerend and Centraal Wonen De Bonvivant, both in the Netherlands. These terraces are well used because they provide a connecting link and have good visual connections with residential spaces so residents can see if anyone is out on the terrace [6.96].

## Positioning of the common space

The positioning of the common spaces varied considerably between different projects. This part of the design is particularly sensitive and it was felt that some common spaces were poorly located. Several different positioning options have been observed based on the projects visited.

### *Separate building*

Some projects, particularly those with larger sites, had a separate building for the common space. This was advantageous in terms of sound isolation. However in wetter climates this meant that people may be more reluctant to venture outside to visit the common house. If the common house is within a separate building it is important that there are clear visual connections, ideally from each of the residences, and from nearby circulation routes [6.97].

### *Entrance*

Locating common facilities at the main entrance ensures a footfall through the common space. This is easier to achieve in urban high density projects than at larger sites with multiple access points [6.98-99].

### *Anchor*

This is where the common space is used to draw people through part of the building they wouldn't normally access in order to pass by other common facilities and residences. This can be done in either of two ways. The first option is to distribute key common facilities throughout the building so that there are multiple anchors. The alternative is to group common facilities to the private side or rear of the site to draw residents to this part of the project, which may feature a communal garden. Generally it would appear that grouped facilities function better because there are more opportunities for spontaneous interaction, particularly at less busy times of day. In larger projects it is impractical to group all functions. Some common facilities such as laundry rooms may need to be sub-divided and located in different parts of the building to reduce travel distance. At Bofællesskab Jystrup Savværk there are two residential streets separated by the common house. Each street has a different common facility located halfway along the street. This encourages residents to walk down the other street which they might not do otherwise.

### *Circulation as common space*

Some of the most successful projects manage to combine circulation space with common areas. There are several advantages to this strategy: it increases footfall within the common areas allowing spontaneous interactions to occur; it can economise floor space, allowing circulation space to also serve as common space; and if well designed it can provide a higher quality circulation space in contrast to a typical corridor. Some of the most successful examples of common space used as circulation space are Bofællesskab Jystrup, Woongroep Kwackershof, Woongroep Lugtensteyn, Takoma Village Cohousing.



6.96 Centraal Wonen De Bonvivant, Rotterdam, The Netherlands  
*The common roof terrace provides a link between the two towers each with a different common space at either end.*



6.97 Bofællesskab Glahusene, Roskilde, Denmark  
*This community has a separate common space which is clearly distinguished from the residential buildings.*



6.98 Centraal Wonen Houtwijk, Den Haag, The Netherlands  
*The main entrance lobby has enough width to provide small meeting spaces, such as the table and seating in this image.*



6.99 Centraal Wonen Houtwijk, Den Haag, The Netherlands  
*Other internal corridors are wide enough for residents to place furniture outside of the entrance to their private residence.*

There are also some interesting experiments in earlier projects. At Centraal Wonen De Banier a key part of the original architectural design included raised corridors which intersected the common areas - yet over time walls were put up between the corridors and common spaces. One of the older residents explained that divisions were put up because of dust and draughts affecting the common areas, rather than issues of privacy. Centraal Wonen De Banier had a very restricted budget which meant that cost savings reduced the construction quality. Had these physical problems not been a problem, it would have been interesting to know how well this design idea would have worked [6.100].

## Variation of common spaces

The common area is one of the most architecturally interesting and sensitive design features of a cohousing project. These are some of the design observations noted from the visited projects:

### *Purpose built common space or adapted residential unit*

A number of the projects constructed by housing associations have fitted the main common facilities into adapted apartments. If the spatial scale of these apartments is not suitable, the dividing wall between two adjacent apartments is usually removed to create a larger space. Many housing associations are apprehensive about the risk of cohousing, particularly in the earlier projects. Subsequently a number of common areas are designed to be reverted back to typical apartments in the event the community fails. This option does have some constraints. The design of the common space requires considerable attention to detail but fitting the design into a standard residential unit can constrain the flexibility of the design. Also the

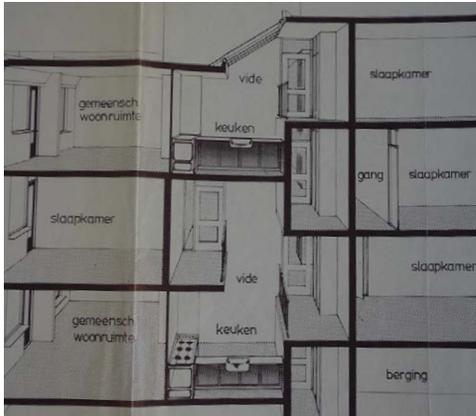
location of this space may not be as suitable as a purpose-built common space.

### *Quality of the Common Space*

The internal quality of the common space environment is one of the most important factors. The common spaces should provide a higher quality environment than the private apartments in order to generate a pull factor which encourages residents to use the space. Factors such as popularity, internal finishes, architectural quality, natural lighting, acoustics, views in and out and environmental performance are just some of the many factors which will determine the utilisation of the common area. If a common area is a delight to be in, residents are more likely to leave their private household to spend more time there.

There are several projects which have very high quality common spaces, but there were also a number which had several issues. Some of the older projects, particularly in the Netherlands, lacked investment from the housing associations. Many of the spaces in these areas were in need of refurbishment and a modest investment would make a big difference. It could be argued that strict budgets meant there was no money to invest; however there were also many other social rented cohousing projects owned by housing associations which did have quality spaces. There is potential for a modest budget to go far in a cohousing project because labour costs can be saved if work is undertaken by the community.

There are also a number of projects, predominantly in the US, which had social areas located in the basement with no natural light. Even considering budget and site constraints, it is surprising to see the number of projects which fail to provide spaces with adequate natural light. This is a fundamental determining factor of whether a space will be well used.



*Architect's section of the original design which indicates the relationship between circulation space and the group common spaces.*



*These open balconies were later filled in by the residents as can be seen in this image.*



*An image of a common space shortly after the construction. This shows the circulation space with open balcony as intended.*



*A view from the corridor which would have once been open to the common space below.*

6.100 Centraal Wonen De Banier, Rotterdam



6.101 Woongroep De Hofstaete, Hoogvliet, The Netherlands  
*The common space has an impractical layout which limits how the room can be used. The design of the furniture also gives the space an institutionalised feeling.*

Surprisingly, even some recently constructed projects do not provide a suitable layout for the common area. At Woongroep De Hofstaete the common area has an impractical layout, is too small and has an institutionalised appearance [6.101]. This is a sign that either the housing association or architect did not fully appreciate the design importance of the common space.

Some projects invested in the services of an interior designer and this has significantly enhanced the quality of the common spaces. At Woonvereniging Voormekaar the interior design scheme helps to enhance the quality of the common space. Another example is at Bofællesskab Kilen which managed to obtain some community grant funding to hire an artist to come up with an interior scheme for the main common area [6.102-3].

A number of the early projects were built in a brutalist style of architecture due to the trends of



6.102 Bofællesskab Kilen, Østerhøj, Denmark  
*The main common space at Kilen.*

the time period. These hard interiors prove less successful for common spaces, and this has been worsened by the limited budget. Subsequently they lack any aesthetic and tactile qualities.

Generally projects constructed by housing associations have more generous common spaces than private projects - particularly in projects constructed during the eighties and nineties. In some private projects the common space has a tendency to be one of the first things to be cut back in the event of increasing project costs.

6.103 Woonvereniging Voormekaar, Boxmeer, The Netherlands  
*An example of a high quality common room space. An interior designer created the unified storage units, fireplace and kitchen work top. The mixture of different chairs and irregular furniture also help to create a domestic feel to the space. This community has a small number of residents which simplified group decisions.*



### *Acoustics*

Acoustics are the most common problem in both senior and multigenerational cohousing, predominantly in the main dining area during mealtimes. A variety of remedial measures had been fitted such as specially designed furniture, ceiling mounted canvases, foam and acoustic sound boards. All of these measures have had varying success [6.104].

Many residents also commented on poor acoustic separation between the common space and private residential apartments. This was a real problem for some projects. They have had to limit the times when the common space can be used. In other projects acoustic separation is only a significant issue during parties and events. Acoustics is a key issue which needs to be addressed at the design stage.

### *Flexible space*

Some projects were able to have separate community rooms for different functions. Other projects with a more limited space had multifunction rooms. This is a good way to save money from the outset and does not necessary detract from the quality of the space. For example at Centraal Wonen De Bonvivant there is a flexible wall between the children's play area and the main common space. This allows the spaces to be combined for large dining meals, as a theatre, as a meeting room, as a bar, a space for dance/exercise classes, a cinema and as a meeting space [6.105]. Having fewer, better utilised, rooms allows more investment to go into these common spaces and it means residents can observe many different activities taking place. A balance needs to be struck: there is a need for community rooms to be multifunctional and well utilised, but there is also a requirement for enough rooms to cope with the community's demands and functions which are less



6.104 Kollektivhus Dunderbacken, Stockholm, Sweden  
*Chairs are fitted with a special acoustic board underneath to mitigate reverberation in the main common space.*



6.105 Centraal Wonen De Bonvivant, Rotterdam, The Netherlands  
*A removable wall between the children's play area allows the adjacent room to double the space. This allows the main common room to be used for large groups, and provides a stage for performances.*

suiting to multifunctional uses such as workshops and children's play rooms.

The design of the tables used in cohousing dining spaces is also important. Communities with fixed tables and lighting rarely changed the arrangement of their dining hall because it was time-consuming to do so. In projects where space is limited, the dining space is often the only large space so it is important that tables are mobile and fold flat. A surprisingly high number of projects had no dedicated storage space for tables or chairs which left other areas cluttered.

Table arrangements and even table shapes and sizes can make a considerable difference to group interactions, the importance of which is often overlooked. A good example of a well designed table system is at Silver Sage Cohousing. Here the design allows residents to change the tables into square or circular tables. Square tables allow tables to be joined together, whereas circular tables are better for group discussions and dining. The tables are also sized to allow 4 to 6 people to sit around a table. This size is small enough to allow the entire table to engage in a single conversation or for conversation to cross over the table [6.106]. With larger tables it is often difficult for people to speak beyond the person sitting either side of them, particularly as noise levels increase during group meals.

Lighting tracks should also be easily adaptable in key locations to accommodate different table arrangements and room uses [6.107].

### *Common Facilities*

The provision of common facilities varies between different projects. All projects had a common room. Most projects were equipped with a kitchen and dining area although many of the senior



6.106 Silver Sage Cohousing, Boulder, Colorado, USA

*Specially designed tables can provide circular or square tables facilitating a wide arrangement of possible layouts.*



6.107 Bofællesskab Glahusene, Roskilde, Denmark

*Adjustable tracks allow room lighting to be reconfigured.*

woongroeps in the Netherlands only had facilities for refreshments rather than cooking group meals.

The kitchen is often considered the heart of a cohousing project in a similar way that the kitchen is often considered the heart of a home. Some kitchens were found to be inadequate whereas some were well organised and benefitted from the input of a kitchen consultant [6.108]. The design of the kitchen was usually dependent on the size of the community. Some kitchens feel commercial in scale with lots of stainless steel appliances and work tops, whereas others have more of a domestic atmosphere. The flow of kitchen tasks is important particularly when considering the serving of food and washing up for large numbers of people. Some projects use commercial grade sanitisers, whereas high end domestic dishwashers sufficed in other kitchens.



6.108 Bogemenskapen Sjöfarten, Stockholm, Sweden  
*A number of the Swedish cohousing projects have specially designed kitchens, optimised for group cooking.*

Projects, predominately in the US, had difficulty with fire regulations. These often required the kitchen to be located in a separate room to the dining area. This was sometimes due to a misunderstanding of the local fire officer when classifying the use of the kitchen. Many projects were classified as a commercial kitchen when this was not appropriate. In examples where the kitchen is separated from main common space, it was felt that this severed important social connections: cooks could not speak with residents passing through the main common space, or supervise children playing in the dining hall [6.109].

There was also an issue in some projects where the commercial grade installations were not practical - for example a number of the cooker hoods generated so much noise it was difficult for residents in the kitchen to speak with one another. It is clear the kitchen requires a lot of attention to design and



6.109 Elderspirit, Bristol, Virginia, USA  
*An example of a kitchen environment separated from the main common space.*



6.110 Woongroep Het Kwartel, Culemborg, The Netherlands  
*The Dutch often quite have quite extensive bicycle storage facilities. This example is located next to the workshop for easy repairs and maintenance.*



6.111 Centraal Wonen Klopvaart, Utrecht, The Netherlands  
*A shop supplying low cost organic produce. The savings are about 10% from normal purchase price.*

should ideally be well connected to the dining area both physically and visually. In Sweden several of the projects have benefited from a specialist kitchen consultant who has managed to design a large scale kitchen but maintain a social domestic atmosphere.

Many projects have a small gym and sauna - these facilities were often less used than intended, or are used only by a very small number of residents once the novelty of having a gym has worn off. In the US it was usual to find a common hot tub.

Workshops varied. Some are large and well managed, others are less organised. Workshops usually rely on several dedicated residents and are considered a particularly useful space when undertaking building maintenance. They were sometimes used for bicycle repairs, particularly in the Netherlands [6.110]. It is therefore practical to locate the workshop adjacent to the bicycle store. Workshops should also have

good access on the ground level with a large door with direct access to a loading bay. There are several examples where workshops were poorly located making it difficult to use them for larger projects or moving heavy materials.

A very small number of projects have a shop. These take quite a lot of voluntary time to operate successfully and are only found in very large cohousing projects [6.111].

A large proportion of the projects have guest rooms. These either consist of a completely self-contained apartment with kitchenette or individual bedrooms located directly off a main circulation route. Separate bedrooms which are not self-contained make use of common showers usually adjacent to a sauna. In projects which do not have communal showers, guests are expected to use the shower facilities of their host's apartment. This was seen as

a less desirable option and a communal shower or self-contained unit is recommended. Guest staying in apartments without a kitchenette usually utilise the community kitchen.

Laundry and mail collection are activities which are often overlooked. These are a necessary part of a resident's daily routine and increase potential for spontaneous interaction. Laundry rooms should be a pleasant environment close to a social area but also provide adequate facilities for airing and drying washing. In some cohousing projects washing is left to dry in common corridors and stairwells - an activity criticised for detracting from the appearance of the internal space.

Mail collection should be accessible from inside the common house or in an area well used by residents [6.112-13]. Some local authorities do not allow postal workers to enter a building even with a designated mail room. A number of projects have mailboxes accessible from outside, and collection on the inside as part of the common space.

The provision of facilities for children and teenagers varies considerably. Some projects simply provided a play room for children of 1 to 8 years of age. Other projects include a teen room. These are either well used or completely unused. At Kollektivhus Prästgårdshagen, Älvsjö, Sweden the residents considered it important to provide separate spaces for toddlers, children and teenagers [6.114].

It was clear that the demographics in a cohousing project can change significantly and children often come in waves. This means there may be a toddler cohort which will age at the same time and make more use of particular rooms at different times.

Young children's rooms should be well supervised and durable. A number of projects visited had children's rooms which were damaged as a result

of lack of supervision and inappropriate internal finishes.

In some cases residents found it helpful to have a small play area at the end of the dining area. This allows parents to supervise very young children whilst finishing their meals. An example of this arrangement is used at Bofællesskab Lange Eng which has a high number of young families [6.115].

The dining area is often the largest space within a cohousing project and can serve many different functions. If tables can be cleared a range of uses might be possible such as an exercise class, or space for a projector screen for a large presentation or film viewing. In some examples the community common space is hired to different community groups. So it is particularly useful if the common space is adaptable to different uses.

It is useful if the design of the common house allows for both a large dining capacity, and also a more intimate space for when there fewer residents dining. Some projects had a room adjacent to the main dining area which could be used to extend the dining area for large events, or closed off and used as a smaller room.

Dining with young children can be a contentious issue in multigenerational cohousing projects. Parenting techniques vary and some residents do not like the additional noise generated. This is one of the main reasons why senior cohousing is preferred by some people. The communities I visited generally use one of the following options to work around this problem:



6.112 Takoma Village Cohousing, Washington DC, USA

*The post room is adjacent to the main common space which allows residents to see what's happening in the main space. This increases opportunities for spontaneous interaction.*



6.113 Elderspirit, Bristol, Virginia, USA

*At Elderspirit the post the local authority would not allow the residents to have an internal mail room. The location of this mail collection point does little to benefit the community.*



6.114 Kollektivhuset Kupan, Älvsjö, Sweden

*This community has different spaces for toddlers, children and teenagers which overlap into the circulation space. This allows a certain level of natural supervision from the older children, and provides plenty of seating areas for parents to sit.*



6.115 Bofællesskab Lange Eng, Albertslund, Denmark

*There is a small play area adjacent to the dining room which allows parents to continue dining whilst very young children play in this area.*

- Rules are established which require that if a child starts crying or screaming the parent must take them out of the dining hall
- The dining space is designed with a physical division for parents with young children
- Different dining times are set for those with young children and those without.

Waste/refuse storage needs to be carefully thought about. Some projects use particular technologies. For example, in Sweden it is common for apartment buildings to have waste disposal chutes operated with a vacuum system. Many cohousing projects had a dedicated recycling area which requires a significant amount of space. This needs to be something considered by the architect at the design outset as creating space after the building has been completed has caused problems.

Some cohousing projects provide individual storage areas for each apartment whereas others use common storage areas. Storage areas with no physical divisions in many cases become messy, cluttered and disorganised. Having spaces designated with locked cages appeared to be a successful means of ensuring that storage rooms remained uncluttered.

#### *Rural/Urban*

The location of the cohousing project also has an impact on common spaces. For example rural areas may have more need for gyms, saunas and a shop. In urban areas there are generally more facilities available locally. Some residents in urban areas also highlighted the importance of using facilities outside the building to maintain a life outside cohousing.

#### *Scale*

The scale of common areas is very important. Some projects have common spaces which are considered too small such as at Stroud Coflats<sup>20</sup>. Other projects have a central volume which felt too large such as Vereniging AWDO Kreilerburcht [6.116]. More successful examples allowed a large gathering, but remained at a scale where it was possible to speak to a neighbour via a balcony. A good example of this is the central space of Woongroep Kwackershof [6.117].

#### *Creating a domestic environment, rather than an institutional environment*

Simple design elements such as the design of signage can make a considerable difference to the feeling of a project. A good example of co-ordinated well designed signage design is at Bofællesskab Lange Eng [6.118].

Having a mixture of different furniture helps to create a domestic atmosphere at Woonvereniging Voormekaar [6.119].

## **Projects sharing other facilities**

There are several interesting cohousing projects which share common facilities with other external organisations. Both parties benefit from having a better quality environment at less cost, but this can involve more complex agreements regarding usage and maintenance. The following are some examples:

#### *Work Units*

Some projects integrate a number of work spaces which can be utilised by residents and in some cases outside organisations. These units can

<sup>20</sup> Stroud Coflats are located in Stroud, Gloucestershire, UK



6.116 Vereniging AWDO Kreilerburcht, Rotterdam, The Netherlands  
*This project proves excellent visual connection between residents walking to and from their apartments however the scale of the central space feels too large.*



6.117 Woongroep Kwackershof, Enkhuizen, The Netherlands  
*The central space in this project is large enough to see a range of activity, but small enough for residents to chat between levels.*



6.118 Bofællesskab Lange Eng, Albertslund, Denmark  
*Signage can be practical, clear and fun as this community has demonstrated.*



6.119 Woonvereniging Voormeekaar, Boxtmeer, The Netherlands  
*Using mixed furniture helps to create a more domestic atmosphere.*

be advantageous to residents of the cohousing community because it allows them to stay close to home. This is particularly beneficial for residents with young children or residents who are unable to commute. Work units also keep the project alive during the working day when many residents are at work, school or college.

The work spaces should be carefully integrated into the design of a cohousing community. Some projects have work spaces but because of poor design they lack desirability and remain empty as a result. A good example is at Centraal Wonen Lavendelstraat<sup>21</sup>, which is linked to the residential community, but has separated access and circulation for the work units.

#### *Community Theatre*

Nomad Cohousing and the Vrijburcht Community share common facilities with a community theatre. There have been some complications where the responsibilities of maintenance overlap, but generally the arrangement works well [6.120-21].

#### *Nursery*

Kollektivhus Trekanten shares its common kitchen with a children's nursery. The nursery uses the kitchen during the daytime and the cohousing community uses the kitchen during the evening. This programme works well, although there have been limitations about which equipment can be purchased for the kitchen and the nursery has very clear instructions about how the kitchen must be kept [6.122].

#### *Cohousing and service accommodation*

Sweden has a number of examples of cohousing combined with service housing. It was intended

that these projects would share common facilities and that the service housing would allow age integration and provide ongoing care for residents in decline. This model did not work as intended. Older residents in the service housing were either too old or infirm to take part in community events and the cohousing community had no demand for a staffed kitchen. Many older residents refused to relocate as they perceived it as a place to die and did not want to accept their level of decline into old age. Stolplyckan mixes multigenerational cohousing with service throughout the same building. This model has proved to be a more successful means to integrate care with cohousing.

#### *Senior care facility*

Although not technically cohousing, De Rokade has apartments linked to a large senior community care centre which is used by the surrounding population as a community centre. Residents can access the social and common facilities in the main building via a glazed link. Originally De Rokade was constructed for seniors; however due to some remaining units being left vacant the housing association allowed younger adults, some with children, to move in. This has unintentionally led to a much more age-balanced active community than was intended but is considered a success. There is a strong resident group, and the surrounding community regularly uses many of the facilities in the care centre which avoids any feeling of institutionalisation.

#### *Accommodation for adults with learning difficulties*

One of the most successful examples of a mixed use project is at Vrijburcht, which combines cohousing with a local theatre and cinema, cafe, work units, a community nursery and accommodation for adults with learning difficulties. Each element can function independently, but the design of the project allows some of these facilities to be used by the community.

<sup>21</sup> Centraal Wonen Lavendelstraat is located in Haarlem, The Netherlands



6.120 Nomad Cohousing, Boulder, Colorado, USA  
*This cohousing projects shares it's common house with a local community theatre.*



6.121 Vrijburcht, Amsterdam, The Netherlands  
*This room can function as a cinema, a theatre, a dining room, a performance space, an exercise room and more.*



6.122 Kollektivhus Trekanten, Stockholm, Sweden  
*This community shares it's common kitchen with the community Nursery which is attached to the building. These images have been put up by the Nursery to show how the kitchen must be left when the cohousing community is finished.*



6.123 Vrijburcht, Amsterdam, The Netherlands  
*The Vrijburcht project combines residential units, work units, a community theatre, a community nursery and a cafe. Some facilities are shared allowing the residents to benefit from a range of facilities.*

For example the cohousing community can use the large theatre space for common meals and the cohousing guest room uses the theatre kitchen.

The accommodation for adults with learning difficulties has separate access but the cohousing community is considered to provide a safe urban locality. This project is an excellent example of how careful architectural design and different community organisations can coexist and benefit from the same facilities [6.123].

#### *Linked facilities which have no interaction*

There are also examples where community facilities have been developed as part of the same community but do not overlap. For example at Woongroep Olivier Van Noort<sup>22</sup> a senior cohousing community has been combined with a community health centre and a school. The residents have easy access to the health centre, but no connection with the school. The residents found the assumption that the close proximity to the school might provide some form of intergenerational crossover patronising.

## **Thresholds and Visual Connectivity**

#### *Entrances to residential apartments*

The space immediately outside the front entrance to each residential apartment is important. In some cohousing projects this space was organised, and part of the overall design. In other projects this space resulted in a disorganised clutter.

If a defensible space is clearly indicated outside a entrance threshold it is more likely that the resident will take some sort of ownership of that area. This is important, particularly in cohousing because it

blurs the boundaries between private and common spaces.

One of the most interesting spatial relationships is at Bofællesskab Jernstøberiet where a number of the residences open directly into the main hall. The defensible space is indicated with a floor marking which was a later addition to the project [6.124]. At Bofællesskab Jystrup Savværk the entrances to residential units are glazed to further blur the of boundaries between private and common spaces [6.125].

#### *Visual connections*

Visual connections are important for residents to maintain links with the common spaces. In many of the early projects, apartments feature windows looking into the common spaces and corridors. It is interesting to observe that many of these windows have since been intentionally obscured. This is more common in corridors presumably because people pass the window at close proximity. Windows with more space outside appear to stay transparent. This suggests that some windows also require some defensible space to work as intended. An example of this is at Centraal Wonen Houtwijk where many of the internal windows have been covered up [6.126,-27].

Many of the common spaces feature large windows to allow residents to see if there is any activity taking place within. In many examples at the time of visiting the projects the privacy curtains were drawn yet the residents were unclear as to why this might be. Nevertheless it is important that residents have the option of having a visual connection transparent or obscured for privacy.

There are a number of projects where the entrance is visually separated from other common areas. This means many residents cannot see any activity

---

<sup>22</sup> Woongroep Olivier Van Noort is located in Gouda, The Netherlands



6.124 Bofællesskab Jernstoberiet, Roskilde, Denmark  
*The floor markings were a later addition to the project. These not only allow games to be played in the hall, but also designate the defensible space outside the residential units.*



6.125 Bofællesskab Jystrup Savværk, Jystrup, Denmark  
*Houses at Jystrup Savværk have a high level of glazing to blur the boundaries between the private realm of the street.*



6.126 Centraal Wonen Houtwijk, Den Haag, The Netherlands  
*Windows facing the internal street remain transparent when there is adequate distance from circulation routes.*



6.127 Centraal Wonen Houtwijk, Den Haag, The Netherlands  
*Windows facing the internal street with no defensible space were often blocked off or covered with opaque privacy screen.*

taking place in the common house or whether it is being used. These are missed opportunities for spontaneous interaction.

Good examples of well positioned common spaces are at Woongroep Lugtensteyn, Woongroep Kwackershof, and Kollektivhusföreningen Färdknäppen. In these examples any resident entering the building will have a clear view of activity taking place in the common areas. A bad example is at Tinggården II where the common house is located below ground [6.128-31].

#### *Kitchen/ dining space*

Fire regulations in some cases prevented kitchens being open to the main common space. This is unfortunate as an open connection is important as a great proportion of common activity takes place in the kitchen. A good example of a well connected kitchen, with a domestic scale is at Kollektivhus Tullstugan, Stockholm, Sweden [6.132].

#### *Overlapping activities and spaces*

Common houses with facilities on the same level generally had better connections between spaces. One of the most successful common space arrangements is at the senior cohousing project Kollektivhusföreningen Färdknäppen, Stockholm, Sweden. Here a number of different activities are adjacent or overlap one other. A resident sorting their washing, or doing their ironing can speak to someone using the craft table or watching television. The main ground floor common spaces have a clear visual link with the main entrance, so anyone entering Färdknäppen from the main entrance can see any activities are taking place [6.133].



6.128 Woongroep Lugtensteyn, Biltoven, The Netherlands  
*The main common space is an elevated glass box which provides visual connections with other common spaces.*



6.131 Boligselskabet Tinggården II, Herfølge, Denmark  
*The main social area in the common house is located below ground level so there is no visual connection with other parts of the project.*



6.129 Woongroep Kwackershof, Enkhuizen, The Netherlands  
*The central space at Woongroep Kwackershof allows many opportunities for spontaneous interaction with other residents.*



6.130 Boligselskabet Tinggården II, Herfølge, Denmark  
*The entrance to the common house at Tinggården II, note the lack of street level activity. Tinggården II was a later addition to the original Tinggården project, designed by a different architectural firm.*



6.132 Kollektivhus Tullstugan, Stockholm, Sweden  
*This community has a simple but effective arrangement. The kitchen is domestic in scale and has excellent connectivity with the main common space. Whenever the kitchen is in use the whole space is brought to life.*



6.133 Kollektivhusföreningen Färdknäppen, Stockholm, Sweden  
*As residents enter the building they pass by the main common areas.*

### *Shared porches, entrances and balconies*

Another way of creating another group division beyond the cluster is to have some shared space with a neighbouring apartment. Each property still requires its own outdoor private space, but the front entrance can share some space with a neighbouring property. A good example of this is at Mosaic Commons Cohousing which features groups of three or four houses with shared front porches. Here neighbours regularly sit outside talking - the community even coined a term for this: *porching* [6.134].

### *Privacy*

It was also noted that some projects lacked their own private outdoor space or terrace which meant it was difficult for residents to entertain dinner guests in privacy when this was desired.

## **Technologies and Maintenance**

Some cohousing projects were affected by various technological issues, which can better inform future projects:

### *Vacuum toilets*

Centraal Wonen Zonnespreng<sup>23</sup> installed a new system of vacuum toilets with the aim of saving water. The system was expensive, is sensitive to breaks, is loud and the pump is located in the basement which is vulnerable to flooding.

### *Planning for better building services integration*

Several cohousing projects had poorly co-ordinated duct work particularly for MHRV (Mechanical Heat Recovery Ventilation) and air conditioning. This

is a result of a lack of co-ordination between the architect, project manager and contractors. A similar problem was found with photo voltaic arrays - some projects did not have adequate storage space for the equipment accompanying these systems.

### *Waste chutes*

Eastern Village Cohousing<sup>24</sup>, Washington DC, USA had a garbage chute system. However the collection room was poorly located which meant that the large waste bins were nearly impossible to move to the collection point.

### *Maintenance of building fabric*

The design of the building fabric and choice of materials is important to reduce costs long term. Many projects were clad in timber which over time can be expensive to maintain. Boligselskabet Tinggården has recently undergone a costly refurbishment of the building fabric 40 years after construction [6.135-36]. In comparison Bofællesskab Kilen constructed in 1987 has a building fabric which is showing very few signs of deterioration. This building fabric is expected to save the community significant maintenance costs.

### *Lifts*

Lifts were often a problem in many of the projects. Cheap lifts were installed to save costs but were very slow to operate. Lifts also require regular servicing and require an ongoing subscription for the emergency alarm intercom system. It is therefore advisable that lifts should either be designed out of the project, or only used in scenarios where they will service a reasonable number of apartments/facilities. Vereniging AWDO Kreilerburcht had to have a second lift retrofitted in addition to the existing lift because it was too small for a stretcher

<sup>23</sup> Centraal Wonen Zonnespreng, Driebergen, The Netherlands

<sup>24</sup> Eastern Village Cohousing is located in Washington DC, USA



6.134 Mosaic Commons Cohousing, Berlin, Massachusetts, USA  
*The porches at Mosaic Commons Cohousing have no neighbouring partitions which helps to create a sense of shared ownership. Neighbours sitting outside - referred to as 'Porching'.*



6.135 Boligselskabet Tinggården, Herfølge, Denmark  
*A lot of the architectural detailing at Tinggården uses timber. This has required a costly renovation of the building fabric.*



6.136 Boligselskabet Tinggården, Herfølge, Denmark  
*The common houses are due for refurbishment and have not weathered well.*



6.137 Vereniging AWDO Kreilerburcht, Rotterdam, The Netherlands  
*A secondary lift had to be installed at considerable expense as the first one was not large enough for a stretcher or coffin.*

or coffin [6.137]. This is a necessary consideration of any housing project, but serves even greater purpose in a senior cohousing project where it is more likely that people may have age-related medical complications.

These examples show that it is the architect's responsibility to consider the modern technologies related to building services and long term maintenance at the design stage of the project.

## Resident involvement in the design

Resident involvement in the design process is considered an important part of the group forming process. However not all projects have had close involvement with resident groups. In Sweden and the Netherlands there are examples of speculative cohousing constructed by housing associations which have been successful.

Resident consultation can add design value to a project but it will also add cost to the design process, add complexity and slow the development process. It is therefore important that such stages are well managed and expectations are managed and kept realistic.

Some cohousing projects have attempted to meet every resident's individual needs resulting in a different design for each apartment. This adds significant complexity to the design and construction process and will result in inflated project development costs.

At Central Wonen Zonnepreng each apartment is different, and configured to the desires of each different household [6.138-39]. Another example is at Eastern Village Cohousing, Washington DC, USA which removed some balconies so that other

apartments were more private, but this may differ to the views of future residents and affects the circulation of the top floor [6.140].

Allowing residents too much choice can significantly increase the construction cost of a project, and it is recommended that architects find a means to offer variety whilst keeping some element of standardisation. This is usually achieved with several standardised modules which can be configured in different ways to suit different users.

It is also important to recognise that many of the residents have a wide range of skills and experience. These resources can offer valuable input into the design. At Woonvereniging Voormekaar the small resident group included a doctor, an engineer and an artist and a range of other professions which significantly influenced the design quality of the project. The group has attempted to future-proof the project. The guest room features a communal bathroom which is designed so that in the future a hoist can be fitted if necessary [6.141]. The group also saved development costs by successfully project managing the development. In this example the group size is only twelve households which meant that the group was easier to organise and delegate. It is likely to have been more difficult to have managed the project in the same way for a larger group.

### *Adaptability*

Speaking to different groups it is clear that adaptability should be considered in projects in different ways.

Demographics fluctuate and in multigenerational projects it is common for demographic peaks to come in waves. For example many projects start with a number of young families with young children. This means as the population ages there is first a



6.138 Centraal Wonen Zonnespreng, Driebergen, The Netherlands  
*Each unit is different at Zonnespreng*



6.139 Centraal Wonen Zonnespreng, Driebergen, The Netherlands  
*One of the oldest single residents also lives in one of the largest properties.*



6.140 Eastern Village Cohousing, Washington DC, USA  
*A circulation route was removed at the design stage on the top floor as the resident requested a higher level of privacy.*



6.141 Woonvereniging Voormekaar, Boxmeer, The Netherlands  
*Each apartment has its own W.C. and shower room, but this project also has a common bathroom when residents prefer to have a bath. This bathroom is fully equipped for a wheelchair user and the use of a hoist.*

large demand for a toddler room, then a children's room and then a teenager room.

This is also a consideration in senior cohousing projects particularly over a period of 20 years. There is a big difference in the requirements of people aged 70 and those aged 90. For example, it may be necessary to facilitate carers, clinics or therapy sessions. It is therefore important to consider that the use and demand of rooms and functions will vary over time.

In senior projects some projects were not designed for a sudden increase in demand of electric mobility vehicles. These take up considerable space and each requires a charging bay - if this is not part of the original design it can be difficult to make space once the building is complete [6.142].

It is also worth considering that the level of community interaction can be more intense in the first few years of a cohousing community. Over time this eases and community functions may lose some energy. When this happens there may not be quite as much demand for the same amount of common space.

Another need for adaptability is caused by the changes in household size over a lifetime. A family might start as a couple, increase to 3 or 4 as the couple have children, and then go back to a couple or individual. Boligselskabet Tinggården and Centraal Wonen Lavendelstraat, Haarlem, Netherlands feature a room which can be occupied by either neighbouring property. This flexible room can be used to increase or reduce the size of an apartment as necessary [6.143]. This system only works well in rented properties as the person occupying the room will pay proportionally more for the increased floorspace. In both examples this concept had been used several times by different residents.

An alternative concept is to have a variety of apartment types which allows residents to switch properties depending on their needs without having to leave the cohousing community. This only works when a property has a suitable apartment available or when another resident is willing to exchange their own apartment. This has worked successfully in many of the rental projects but is more complex in privately owned cohousing communities [6.144]. Theoretically older residents should move to a smaller apartment once they become empty nesters to allow families to use the family-sized units but in reality many older residents stay put in the larger units. This is a difficult problem for communities to overcome and is reliant on the individual views and choices of the resident occupying the larger apartment or house.

Common guest rooms are another means to add adaptability to a cohousing project. These rooms can provide important flexible space for new residents who wish to spend some time with the community before moving in. Guest bedrooms or apartments also provide a useful space for teenagers and young adults returning from university who may prefer not to live with their parents [6.145]. Depending on the design guest bedrooms can also be used as workspaces.

## Numbers and Clusters

The question of project size is an interesting one. Communities vary and a fixed scientific or mathematical formula cannot be applied in a similar way to the systems approach to architecture. Despite this it is evident that some group sizes work better than others, so it is important learn from previous examples.



6.142 Woongroep Kwackershof, Enkhuizen, The Netherlands  
*Many cohousing communities have not anticipated the space required for mobility vehicles.*



6.143 Centraal Wonen Lavendelstraat, Haarlem, The Netherlands  
*A room between apartments can be used as a store room, or an extra bedroom for either of the adjacent houses.*



6.144 Woonkollektief Purmerend, Purmerend, The Netherlands  
*This community was large enough to enable many residents to move apartments as their needs changed. This process is simplified in rented accommodation.*



6.145 Centraal Wonen De Bonvivant, Rotterdam, The Netherlands  
*Guest rooms or apartments can provide additional flexibility for the community.*

If the group is too large neighbours can find it difficult to know each other, organising the community can become difficult and the sense of ownership lost. If the group is too small it can place pressure on the community and if several people do not partake in community activities it makes a large difference. It is also natural that not all residents will get on with one another so it is important that there are enough people in the community to diffuse any differences. A larger community often results in a greater range of common facilities, and a smaller community is more likely to have more modest facilities.

The book *Cohousing* suggests, as a rough guide, that a small community consists of approximately 6 to 12 households, a medium community 13 to 34 households and a large community 35 plus households<sup>25</sup>. It is important to note that the size of households also varies considerably. A household for a family may have 4 or 5 occupants, whereas a household for seniors may only have 1 or 2 occupants. Senior cohousing projects may therefore have a large number of households but only half the total occupants of a multigenerational project. The Dutch and Swedish projects are sometimes larger than the Danish and US cohousing communities.

When I spoke with the architect of Centraal Wonen Delft, Flip Krabbendam, he explained their use of group sizes was influenced by German and Danish collaborative projects [6.146]. As a guide the following figures were used:

- 8 to 12 is suitable for a group and personal connections with regular contact.
- 30 is suitable for a cluster, which may share some common facilities; no written rules are needed.

- 120 is suitable for the whole community - the number of people that you can know by name and face.

There is not a great deal of literature or scientific research on this subject. With such a rich history of housing experiment it would be useful to know which other factors have influenced group size and to bring this information together. There is more recent research on group numbers for workplace environments but there appears to be relatively little information relating to residential environments.

There are more subtle ways in which residents can divide themselves into groups with personal connections such as friendships and their proximity to one another. For example at Shadow Lake Village Cohousing the houses are on three different streets and each street has formed a sub-community of its own [6.147].

Speaking to some of the older residents at Eastern Village Cohousing they felt that this project was too large, consisting as it did of sixty apartments. The group explained that residents have formed their own subgroups who cook for each other. Over time this has fragmented the community as a whole [6.148].

At Kollektivhus Trekanten a very large apartment building started with the intention of a cohousing community but many tenants moved in without any interest in cohousing. Now only a fraction of the original group still operates as a cohousing community and partakes in the common meals. This is an example where the building was so large that the sense of community and ownership has been difficult to maintain [6.149].

Bofællesskab Munksøgård, Roskilde, Denmark is one of the most interesting projects in terms of size and subdivision. The project is very large with

---

<sup>25</sup> McCamant, K. & Durrett, C. (1988) *CoHousing: A Contemporary Approach to Housing Ourselves USA*: Ten Speed Press p.158



6.146 Centraal Wonen Delft, Delft, The Netherlands  
*Centraal Wonen Delft was quite an experimental project. The design of each cluster common space is different. This example features a living space in-between two shared kitchens.*



6.147 Shadowlake Village Cohousing, Blacksburg, Virginia, USA  
*Each street has a different character and acts as an informal community subdivision.*



6.148 Eastern Village Cohousing, Washington DC, USA  
*The residents of this project suggested the community was too large which caused residents to create their own groups. This has led to a fragmentation of the community as a whole.*



6.149 Kollektivhus Trekanten, Stockholm, Sweden  
*The cohousing community at Trekanten now only forms a small proportion of the whole building.*

over 200 residents and comprises five clusters each with a different demographic and its own common house. Three of the clusters are owned by a housing association. The others are private ownership arrangements. There is a cluster for young adults, for seniors, for families in social housing and for families with a higher income. Each of the clusters is similar in appearance, but the individual house types are suited to each group. Each cluster allows similar resident types to cook and dine together, but the work and committee groups mix residents from each of the different clusters.

Group size is one of the key design considerations for the cohousing group and the architect. There is scope for further research in this area which would help inform other types of housing.

## Security

The community environment provided by cohousing means natural supervision is a key advantage in reducing burglaries and it is more likely a neighbour will notice if a stranger is acting suspiciously. There are however a number of experiences from different cohousing projects which are worth noting.

It is important in design terms that common spaces are easily accessible by the residents with as few barriers as possible. This does not mean that security should not be considered in detail at the design stage particularly in urban locations.

At Centraal Wonen Katerstraat the project was designed with a through street, but this was used by homeless people and drug addicts. Eventually large gates were fitted which changed the image of the urban environment. Had this scenario been discussed at the design stage an alternative solution may have been developed [6.150].

At Centraal Wonen De Banier alcohol was regularly stolen from the bar. In response security gates have been fitted over the entrances to key common spaces. This not only detracts from the atmosphere of the common spaces but also prevents residents from dropping in to use the space [6.151]. Common bicycle storage has also been an issue. In cases where bicycle thefts have occurred, many residents place their bicycle outside their flat which can clutter the circulation spaces. The design of the cycle store is therefore important. The door should close and lock automatically to avoid cases where residents forget. If possible the facility should have some form of natural supervision [1.152]

The open nature of common spaces can make them an attractive target for theft. In Sweden urban projects were generally more secure as the main street entrances were kept locked and the ground floor common areas regularly had residents walking through them. Most problems of theft seem to occur in suburban projects.

Bofællesskab Kilen had an arts grant which was used to fit out the common space with a special interior design scheme. This design scheme included 50 specially designed dining chairs of high value. Unfortunately these were stolen early one morning. They were replaced. The same theft then reoccurred later in the year. The insurance company refused to pay out the second time [6.153].

This suggests that either a project has to be made secure, or common areas should not contain valuable items which might attract thieves. A security strategy should be considered at the design stage in order to provide a solution which secures the project without affecting the internal movement and interaction of residents. Retrofitted security measures had a tendency to be uncoordinated, detracting from the quality of the project, and impede the flow of



6.150 Centraal Wonen Katerstraat, Den Haag, The Netherlands  
*The gates fitted to secure this through street detract from the impression and atmosphere of this project.*



6.151 Centraal Wonen De Banier, Rotterdam, The Netherlands  
*Security gates have fitted retrospectively have had a negative impact on the use of these common spaces.*



6.152 Centraal Wonen Houtwijk, Den Haag, The Netherlands  
*Bike stores are a lucrative target for thieves. A well considered security approach should be considered at the design stage of the project.*



6.153 Bofællesskab Kilen, Østerhoj, Denmark  
*This community once had specially coloured chairs to match the interior design scheme yet these were stolen on two separate occasions. The insurance company refused to pay following the second theft.*

residents between spaces. A well considered design integrated security solution may be able to avoid these problems.

## Accessibility

Most projects provide good accessibility although some older projects have been difficult or costly to adapt to modern accessibility standards. A key concept of the architectural design of Bofællesskab Jystrup Savværk is the difference in levels. Although the design is beautiful, it makes the project impossible for someone with limited mobility [6.154-55].

Designing for different climates is also important when considering accessibility, particularly in senior projects. Many of the entrances in projects were not level thresholds. This makes it difficult for a wheelchair user to gain access to the building. It was surprising to discover this issue even in some recently completed senior projects. Other projects which did have a metal grating for level threshold entrances became slippery in winter.

The site design is also important. At Pioneer Valley Cohousing the pathways are steep and become slippery in winter. At Silver Sage Cohousing the ground finishes and outdoor stairwells regularly frost over in the Colorado winter climate. This makes it difficult for residents to leave their apartments [6.156].

It is preferable to be able to access the common space without being deterred by outdoor climatic conditions. (This is less of an issue in projects such as Sand River and Stone Curves Cohousing<sup>26</sup> where the climate is nearly always hot and dry.)

At Seniorbofællesskabet Egebakken the residents

discovered it was impossible to get a stretcher through the front entrance of the houses because of the angle and proximity of the connecting doors in the entrance lobby. This was only discovered when one of the residents required an ambulance [6.157]. There was a similar problem at Vereniging AWDO Kreilerburcht. In this case the existing lift was too small for a stretcher or coffin and subsequently a second, larger, lift has had to be retrofitted at great expense. Although not a common scenario, ambulance call-outs are likely to be *more* common in a housing project designed for senior living.

## Organisation and Community

The following are observations about the organisation and community of the cohousing projects following the site visits.

### Conflicts

There were several projects where there were clearly tensions between residents. It is important that the expectations of residents planning to live in a cohousing community are realistic. There are many processes which have been developed to resolve tensions between residents. In a cohousing community it is important to respect each other's privacy: if a resident wishes to be social or private this is usually indicated in a subtle way such as by leaving the front door of an apartment open or closed, or a blind raised or lowered. These subtle signs act as cues generally agreed by the community which will indicate the level of privacy a resident requires.

It is also important that residents can disagree and say no to things without feeling it is confrontational. Saying no, or disagreeing with something needs

---

<sup>26</sup> Stone Curves Cohousing is located in Tucson, Arizona, USA



6.154 Bofællesskab Jystrup Savværk, Jystrup, Denmark  
*Stairs are level changes are common throughout this project.*



6.155 Bofællesskab Jystrup Savværk, Jystrup, Denmark  
*Part of the architectural delight of Jystrup Savværk is it's change in levels however this makes the project completely inaccessible to a wheelchair user.*



6.156 Pioneer Valley Cohousing, Amherst, Massachusetts, USA  
*The topography and external circulation routes can be difficult, particularly for elderly residents in the winter.*



6.157 Seniorbofællesskabet Egebakken, Nødebo, Denmark  
*The angle and distance between the two entrance doorways made it difficult for an ambulance crew to carry a resident out using a stretcher.*

to be viewed constructively rather than in a confrontational manner. Most of the projects visited appeared to function cohesively and disagreements or conflicts had been resolved or diffused within the community.

There are many examples where one or two residents have moved into a community and rarely take part. They may have moved in for the wrong reasons. This is difficult to avoid even with an resident interview process. It is also important to observe that some people go through phases of being more and less involved in community depending on their personal circumstances.

## **Community Projects**

Many of the most successful cohousing projects have ongoing projects or common interests. At Bofællesskab Jernstøberiet the building was originally an old iron foundry. Since moving into the project in 1981 the community has gradually improved the building and garden with community work groups. These projects include aspects such as renovating the main hall and installing a new terrace or kitchen. It is important the community has something to work towards and these projects are an important means to bring the community together. It can therefore be a positive if not all elements of a cohousing project are completed following the first phase.

## **Atmosphere**

Some projects felt more alternative: they were similar to student living and common spaces were less tidy, whereas other projects felt well kept, tidy, and well managed. Most residents in cohousing hold a university degree or some form of higher education qualification and many communities

have a range of residents with different areas of skills and expertise. I met residents from all sorts of professional backgrounds, although it more common to find residents with a profession linked to a social need of some sort - for example teachers, doctors, social workers, etc.

The location of the project sometimes influenced the atmosphere of a project. Urban projects tended to have less attendance at common meals as people had other commitments in the city, whereas rural projects tended to be more community-focussed [6.158].

There is also a notable difference in atmosphere between senior and multigenerational cohousing. Many people argue that multigenerational cohousing is more lively and mealtimes more noisy. This is not to say that senior cohousing projects are quiet. Some senior cohousing groups are very active and many are involved in voluntary organisations. Other senior cohousing groups had a more traditional atmosphere focussing on activities such as bowls, gardening and painting [6.159-61]. There is also a big difference in atmosphere between senior cohousing groups with an average age of 65 and those with an average age of 76.

## **Turnover of Residents**

It is important that new residents are interviewed by representatives of the community to ensure new people are likely to be compatible with the existing community. This is also important to ensure that new residents are moving in for the right reasons. Cohousing projects with particularly high quality housing, low social rents or desirable urban location were most at risk of having new tenants moving in for reasons other than community.



6.158 Takoma Village Cohousing, Washington DC, USA  
*The meal times at Takoma Village are often at a more intimate scale in comparison to larger projects.*



6.159 Kollektivhusföreningen Färdknäppen, Stockholm, Sweden  
*Färdknäppen is a lively urban senior community and hosts regular events.*



6.160 Woongroep Castellum, Amersfoort, The Netherlands  
*Woongroep Castellum has a more traditional community in comparison to Färdknäppen*



6.161 Bofællesskab Lange Eng, Albertslund, Denmark  
*Meal times at Lange Eng are noisy and buzzing with energy because of the high number of young children.*

Projects where the housing associations rather than the community let apartments had led to a gradual fragmentation of the community. Private cohousing more commonly has a lack of control over new tenants unless a co-operative ownership agreement is made when the initial group forms. It is important this has some legal agreement to retain the rights to select new residents.

Both multigenerational and senior cohousing projects often have a maximum age limit of new tenants to ensure the demographic mix remains balanced. Most of the cohousing projects visited had no issues finding new residents.

## Personalities

It was very apparent that a number of projects relied on one or several key members of community to see the development of project through from start to finish.

## Looking out for one another

In a cohousing community it is more likely you will be missed if you are not seen for a while, more so than in a traditional neighbourhood. Some senior communities take this one step further and have systems in place to ensure the most vulnerable residents will receive help in the event of a fall, or having a seizure during the night.

At Vereniging AWDO the residents hang a tag on their door at night. Each resident will take it in turns each day to check if the sign is still there at lunchtime. (The non-removal of the sign may indicate a problem.) There are different signs for couples and single people to differentiate those residents who wish to have this monitoring [6.162-63].



6.162 Vereniging AWDO Kreilerburcht, Rotterdam, The Netherlands  
*An example of a tag. A different tag colour is used for couples to indicate they are less at risk.*



6.163 Vereniging AWDO Kreilerburcht, Rotterdam, The Netherlands  
*Tags are placed on doors before the residents go to sleep. If the tag is still there at midday the next day other residents will know that something is wrong and can check in with their neighbour.*

## Interactions with the surrounding residential community

One of the big advantages of cohousing is that it can act as a catalyst for neighbourhood regeneration. A cohousing community brings empowerment to the residents and can act as a neighbourhood hub. The greater number of people in a cohousing community and common facilities in which to discuss ideas gives the community a louder voice. There are a number of examples where cohousing projects have had a positive influence on the wider residential area whereas others have been more self-contained and neutral.

Many projects included people who would like to be part of the cohousing community but could not as there are simply no residential units available. Sometimes these residents live in the immediate neighbourhood but are still able to become part of the community. These peripheral residents undertake the same common chores, help to cook, dine and take part in meetings but simply do not live within the cohousing development. Only some projects offer this option as there is sometimes a risk that increasing the community size any further would cause problems. A good example of this is at Elderspirit, a senior cohousing project, in Virginia, USA. This community has allowed several surrounding properties to join the senior cohousing community. This makes a real difference to these residents who would otherwise be relatively isolated in detached housing in a typical US suburb. The cohousing community in this example has become the heart of the neighbourhood [6.164-65].

The common house can in some cases also benefit the wider neighbourhood as a meeting point for certain meetings and events. An example of this was at Mosaic Commons Cohousing, which was hosting an event about home schooling whilst I was



6.164 Elderspirit, Bristol, Virginia, USA

*The Elderspirit community also has members living in the surrounding residential community. This means this cohousing community has a positive impact on the wider neighbourhood.*



6.165 Elderspirit, Bristol, Virginia, USA

*The common dining room at Elderspirit.*

visiting [6.166-67]. Another example is the central common space at Woongroep Lugtensteyn which is sometimes used to host private views for art work. LILAC Cohousing provides an area for a local baker to leave deliveries for the local community to collect [6.168]. Other communities offer collection points for food boxes supplied direct from local farmers.

Centraal Wonen Delft physically designed the project to be open to the wider residential neighbourhood. A neighbourhood route runs through this large project. The intention of design was that the largest common space could be accessible to residents of the wider community when certain events take place. Although in practice few external residents use the bar, the design of the project opens up to the community more so than many other communities [6.169].

## Cultural Differences

Some cohousing projects are designed for specific cultures which may require different levels of privacy, community organisation and community facilities. Woongroep Orkide was designed specifically for the senior Dutch Turkish community and subsequently had a more private relationship between individual apartments and the common spaces [6.170-71]. Specialist projects such as this may be a consideration for future housing projects in the UK which has a number of different ethnic groups.

## Private Landlord Model

Another interesting cohousing variation was at Boulder Creek Cohousing, Boulder, Colorado, USA. Here a landlord owns 15 properties as part of a typical condo arrangement which means the



6.166 Mosaic Commons Cohousing, Berlin, Massachusetts, USA  
*Hosting a community event at the common house.*



6.169 Centraal Wonen Delft, Delft, The Netherlands  
*The main common space is on a public route and is open to members of the wider community although not many come to this space.*



6.167 Mosaic Commons Cohousing, Berlin, Massachusetts, USA  
*The common room rearranged to accommodate facilitate a presentation.*



6.168 LILAC Cohousing, Leeds, West Yorkshire, UK  
*The mail room at LILAC is also used as a collection point for bread collection by a local baker.*



6.170 Woongroep Orkide, Rotterdam, The Netherlands  
*The main common space. This project does not have a more relaxed living room setting.*



6.171 Woongroep Orkide, Rotterdam, The Netherlands  
*Wide corridors, but there is no overlap of the private space, to the common space as can be seen in many other projects. This may be a cultural difference or a result of a lack of demarcation to indicate defensible space.*

cohousing community consists entirely of renters. One of the apartments is used as the common house and the landlord offers a rental discount for residents who partake in common activities. This model benefits the landlord because tenants self-select new residents and are happier so have a tendency to stay longer. The tenants appear to enjoy the sense of community which would otherwise be difficult to facilitate in this type of development [6.172]. I only know of this one example of this model. It could be argued that cohousing should be community-orientated rather than profit-orientated. However the UK market is becoming increasingly reliant on private capital and this model may be a means to gain sufficient funding to develop cohousing. The model is also interesting as it is using a financial incentive to encourage community interaction. It will be interesting to see how this community develops long term.

## Combination of Private Renters and Owners

There are a small number of cohousing projects which combine home owners and renters. At Centraal Wonen Hof van Heden the owners make decisions on long term purchases, which could in some cases lead to a division between owners and renters. Some long term renters felt a lack of empowerment whereas others were happy with the arrangement. The main concern for the community is that rental accommodation tends to have a higher turnover than owned property. It is however a means to make the project more accessible to young adults and young families who would otherwise not have enough equity to buy into the project [6.173-74].

Despite the community's concerns many of the renters have stayed since the completion of the project and this example shows that the owner/

renter combination model can work. Bofællesskabet Drejerbanken<sup>27</sup> was constructed in 1978 and consists of ten rental units and ten owner occupied units. This community is still in existence today with the same balance of rental and private properties and this demonstrates the private/rental model can work long term [6.173-74].

<sup>27</sup> Bofællesskabet Drejerbanken is located in Skalborg, Denmark



6.172 Boulder Creek Cohousing, Boulder, Colorado, USA  
*One of the apartments is used as the common house but it is considerably less functional than the purpose built common facilities in other projects.*

6.173 Centraal Wonen Hof van Heden, Hoogvliet, The Netherlands  
*Residents working in the garden on a community work day.*





# 7. Conclusion

## Is Cohousing a solution?

Our society is about to experience a demographic time bomb. The next thirty years will see many residential building projects and it is important that we make the right choices now in order to avoid a social crisis.

Cohousing and senior cohousing are not presented as a single solution to the problems associated with ageing and housing. If cohousing does prove popular in the UK, it will need to be one of several housing options as part of a holistic strategy. It is clear that many of our existing accommodation options no longer meet the expectations and aspirations of the upcoming generation of older people. Both multigenerational cohousing and senior cohousing have several different adaptations and there is great potential for this type of housing concept to be developed further.

It is important to recognise that cohousing is not for everyone. It is most suited to those who are looking for a balance between independence, privacy and community life. It is geared towards social interaction and subsequently suits those who are inclined to take a positive, active part in a residential community.

Cohousing is currently subject to a range of preconceptions about communal living, many of

which are inaccurate or untrue. These perceptions may be difficult to overcome in the UK, given the tendency to associate privacy with home reflected in a conservative housing market. The numerous site visits have shown that cohousing is not a way of living for *alternative people* - it is an *alternative* for *ordinary people*.

The site visits have made it clear that cohousing is inclusive, and has a number of key advantages for older people but expectations must be managed and kept realistic.

Multigenerational cohousing, and to an even greater extent senior cohousing, is sensitive to the age of its demographic mix. A balanced spread of ages is important to sustain the community over time and this affects the intake age of new residents.

Cohousing is *inclusive to older people ageing within a cohousing community*. In fact there are often more older residents than younger residents in many cohousing communities, but as a result communities are likely to *exclude older people wishing to move at a late stage of life* such as those over 70. It is therefore important that residents plan for their future before they reach the age of 66. It is also important to note that many senior projects were less willing to accept older people with degenerative illnesses in case they expected more from the community than they would be able to contribute in following years.

7.1 Woonkollektief Purmerend, Purmerend, The Netherlands

*The oldest resident holding the youngest resident. One of the advantages of multigenerational cohousing is the interaction between all ages. New babies are celebrated in the Netherlands with blue or pink sprinkles on a 'beschuif'. In this case they are pink indicating the baby is a girl.*

Both models of cohousing provide a level of generational interaction - more so than typical housing.

Multigenerational projects provide interaction with children and young adults, whereas senior cohousing provides a smaller range of intergenerational interaction between peers. A 60-year old will feel very young in comparison to a 80-year old.

One of the greatest benefits to older people is that of mutual support. The section on geriatrics and gerontology clearly indicated the importance of our social environment in old age. Neighbours in a cohousing project look out for one another and are more likely to notice if something is wrong. This in-kind watchfulness is limited to the support a community can, and should be expected to, provide. Cohousing is not a replacement for long term care and other options should be considered for those who seek or require a higher level of care. It is for people who are fully independent and not seeking a community to look after them.

There are now a number of multigenerational projects which have existed for over 40 years, and many more, including senior projects, which began over 30 years ago. These communities have been around long enough to have a significant turnover. This demonstrates that there is a sustainable level of new residents to keep communities going and is a promising indicator that the cohousing model works long term.

Although significantly less, there are a number of communities which have not survived the test of time. In these cases it is important to understand why such projects have not worked. The most common

reasons appear to be: lack of empowerment of the group to select new residents; a lack of group formation prior to the building design/construction process; an unbalanced age demographic; and poor site location.

There were a number of projects which offered light support for vulnerable adults. In these examples it is significant to note that older adults provided support for other, often younger adults. This shows that the focus of care is not always placed on the older residents and instead the spare resource and skills of older residents can be of great benefit to others. Older residents in these projects experienced high level of satisfaction from helping others.

## Challenges faced by the UK

Cohousing is very promising but there are a few considerations as to how it is implemented in the context of the UK.

### *Changing public perception*

Public perceptions of cohousing are likely to change as people come to learn of projects and the experiences of residences. Many existing projects host regular open days and the UK Cohousing Network is already doing considerable work to educate both public and professionals about cohousing. The organisation has witnessed a significant increase in interest over the last decade which is an indication that the public, particularly people of the baby boomer generation, are taking the initiative to see what cohousing has to offer. A significant step further will be the construction of the first senior cohousing project in UK which will

7.2 Centraal Wonen Houtwijk, Den Haag, The Netherlands

*Residents are gathered in the main space to celebrate the birth of a new baby while two residents work on some new decking.*





act as a precedent and an educational source for subsequent projects.

#### *Fuelling the construction sector*

The UK has a stagnant housing construction sector as a result of a struggling economy. A considerable amount of equity is tied up in the property of older generations - many of whom are living in a family house which is too large or unsuitable. Alternative housing needs to provide greater benefits than the existing house to get baby boomers to move. New co-operative projects can release the equity held in the existing project. This will fund the development of new housing for seniors and will help fuel the construction sector, providing jobs and freeing up existing larger housing stock for families.

#### *Funding the development of cohousing*

The site visits have shown that cohousing is flexible, and can work in a variety of buildings and tenures although each one comes with advantages and disadvantages. In Sweden and the Netherlands it is common for cohousing to be owned, constructed and rented by public housing associations. The UK model is more similar to the US and it is likely that many projects will be privately funded by resident groups. Over time housing associations may provide greater support with financing and underwriting loans. Local government can help by facilitating workshops, allocating sites and keeping a list of interested parties.

There are also options for collaborative projects with other organisations. We have seen examples of cohousing combined with various community facilities such as nurseries and theatres, in some cases with great success.

It may be that we see a number of mixed tenure projects providing home ownership and rentals which will make cohousing available to lower income groups. We may even see cohousing projects owned by a developer and built to let - only one of these examples has been seen in practice.

#### *Importance of good design*

The community itself is the most important aspect of cohousing. However it is clear the architecture of the various spaces, and how it facilitates interactions between these spaces, can make a considerable difference to the interactions within a cohousing community.

The range of projects offered a number of different design ideas. One of the most successful and applicable to the UK is the use of internal streets and courtyards. Visual connectivity between spaces is also key and there were several different examples of how this can be done.

There are many different existing examples, some which have worked well and some not so well. Surprisingly many of the mistakes found in earlier projects were also repeated in new projects. This shows that there is a need for the profession to learn from past examples so that future opportunities are not missed. Post-occupancy studies would further help understand the impact design has on the behaviour of the occupants.

Projects will vary depending on the forming group and the design process can be used as a means to help build solidarity within the group. This process requires a level of understanding and consultation, skills which need to be better developed in the architectural profession. The community



consultation skills associated with cohousing could also be applied in other projects.

It was also interesting to note the importance of having ongoing tasks in a community. This means there is an opportunity to phase elements to be completed by the community at a later date. Such tasks can be beneficial to the group process.

A number of projects have pioneered internal streets and courtyards. The UK has a variety of different climates, and it is advisable that this option is considered too. Projects with external spaces in locations with a variable climate found that the social activity varied depending on the time of year, whereas in glazed common areas activity occurred all year.

The lack of available sites in the UK means that a significant proportion of both multigenerational and senior cohousing projects will need to be retrofitted into existing buildings. This can in some cases lead to some interesting designs, but in many more cases retrofitted buildings have led to reduced visual connections between common areas and hampered the layout. Great care will need to be taken in the consideration of how existing buildings will be adapted to optimise the space for the community.

It is also important to note that not all of the most exciting, or interesting, cohousing projects were high budget. Indeed there is a noticeable difference in some of those projects which obviously had a higher budget. However many good examples had restricted budgets and were constructed to provide social housing. Good design does not necessarily have to cost more.

7.4 Woongroep Lugtensteyn, Bilthoven, The Netherlands  
*View of the residents during coffee time on a summer day.*

These examples highlight the importance of good architectural design in cohousing projects. The design of cohousing is particularly sensitive - more so than typical housing. Cohousing requires delicate consideration of the semi-private and semi-public overlaps, which are not found to the same extent in conventional housing.

The architect can also play an important role in group forming and project management, although this can vary from project to project.

### *Managing the 'decline' in old age*

Some of the most successful housing models which successfully dealt with the decline associated with the old-old (usually those 80+) were part of a much larger public planning projects. In the Netherlands there is the example of linking the care, social community facilities and multigenerational housing. In Sweden there have been several experiments, the most successful of which mixes professional care with a multigenerational cohousing project. These large scale planned projects may be a solution but it is unclear as to how this might applied in the UK which is facing further privatisation. Future care projects are likely to be private enterprises whereas cohousing is more likely a grass roots, resident-funded model. Neither of these models suits large scale investment with inter-governmental services. In a time of financial cut backs and privatisation we need to retain an element of state collaboration to ensure these types of projects remain feasible.

Both Senior and Multigenerational cohousing will form part of the solution as to how we house an ageing population. How quickly this happens will depend largely on how long it takes for the

perceptions of politicians, professionals and the public to change.

Cohousing has been tested long enough to show that it can sustain itself beyond the initial forming groups and we have all of the knowledge and skills required to implement different economic models.

Architecture needs to remain innovative and learn from past experiences to ensure that we do not miss opportunities in future projects. Only time will tell if the UK will go on to develop its own variation of cohousing.

We have a history of speculative construction in the UK. It is popular for developers and politicians to roll out housing models but cohousing is not so simple. Cohousing involves building community in tandem with housing. The added complexity and intricacies associated with forming a group, building community and the design and procurement of a cohousing community are significantly outweighed by the long term benefits for residents and the government.

Both multigenerational and senior cohousing have the potential to not only benefit the older people in the UK, but the rest of society through a strengthened social community, reduced healthcare, a more socially sustainable solution to housing, and the potential of a reduced generational divide.



## 8. Recommendations

- Further education and promotion of cohousing will help public and professions gain a more accurate understanding of cohousing and its associated risks and benefits. Particular focus needs to be placed on: politicians, policy writers, local authority planning, housing and social services departments, architects, property developers and housing associations.
- The support of local authorities and housing associations in The Netherlands, Denmark and Sweden has been a key catalyst for the development of cohousing in these countries. We need the UK to develop similar support through local government, and involve delivery vehicles such as the Community Land Trust model, underwriting (but not financing) loans; allocating and reserving sites; including cohousing in local planning strategies; hosting workshops; maintaining a list of people interested in forming a cohousing project
- There is a need to have more 'joined up thinking' between government departments and particularly better collaboration between planning, housing, health and social services departments.

*Overlooking the common patio at Jamaica Plains Cohousing, Boston, U.S.A.*

- We need to become more innovative. The Dutch are leading the way in Dementia care. Sweden has combined serviced apartments with cohousing. We need to retain public-private cooperation and plan on a greater community scale with overlapping facilities and services. Additional funding may come through local community partnerships as we have seen with the use of shared facilities in other projects.
- There are many existing experiments and a great variety of building designs used by cohousing communities. There needs to be more post-occupancy research on existing projects to identify what could be improved. Aspects such as environmental behavioural psychology and research regarding group numbers could be useful.
- Bringing together different design strategies and common house layouts would help future groups and designers. Some good literature already exists but many are out of date, focus on specific countries or are in different languages. The various cohousing organisations are already helping with this via their online web portals.
- There is potential for a greater level of architectural innovation and experimentation. The cohousing projects populated predominantly by young adults show the potential for alternative models of living for young professionals. There are also other typologies which could be combined with cohousing. Could the kangaroo house concept of young professionals supporting older adults be integrated into a cohousing variation?
- There is potential for architects to be better educated about community design. Can the profession be better equipped with consultation skills?
- It is important that government ensures the public are aware of the importance of thinking ahead and planning housing in older age. Many cohousing projects find it difficult to accept adults who are too old so people need to move early enough.



## 9. Case Studies

There are many different examples of cohousing in different locations, tenures and in structures of different size and layout. It is important that we learn from what works well and not so well, so that we can better inform our own development of cohousing in the UK.

The following are several brief case studies each picked out because each has different lessons. The learning points for each one are summarised.

*The garden and common house at Woonvereniging Voormekaar, Bozmeer, The Netherlands.*

# Stroud Coflats

- Retrofitted into existing church structure
- Common spaces too cramped to work effectively and corridors do nothing to create defensible space. This highlights the importance of scale and proportions in common areas.
- Was constructed speculatively without a design consultation group. This meant when many of the residents moved in there was no pre-formed community.
- Other examples of urban cohousing is more successful, particularly in Sweden.

**Type**

Multigenerational

**Tenure**

Private

**Building**

Retrofit, residential

**Density**

Urban, high density

**Completed**

2006

**Location**

Stroud

Gloucestershire

UK



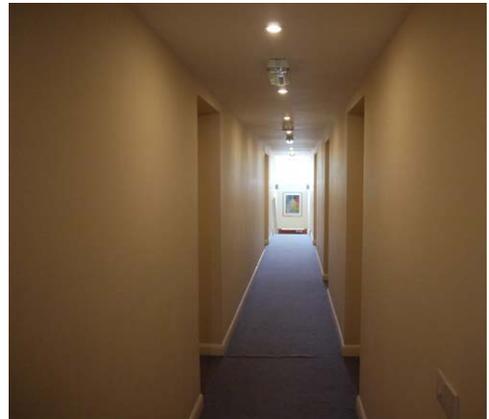
*The residents commented on the common spaces being too small.*



*The kitchen is located downstairs with no external windows which impacts on the desirability of the space as a gathering place.*



*Stroud Coflats is retrofitted into an existing church structure.*



*Circulation spaces are dark and not somewhere people want to stop and chat with neighbours.*

# Springhill Cohousing

- The first *purpose built* cohousing community in the UK.
- Common house links upper and lower levels of steep site topography
- Common house functions are split onto different levels with access at top level and lower level
- Most activity occurs on the lower street which means houses and apartments situated away from the street may miss out on some of the activity.
- A mixture of different house and apartment types are available to attract a broad range of ages and income levels.
- Some apartments can be rented.

**Type**

Multigenerational

**Tenure**

Mixed

**Building**

Purpose built, residential

**Density**

Suburban, medium density

**Completed**

2006

**Location**

Stroud

Gloucestershire

UK



*The kitchen and dining area on the top floor of the common house.*



*The workshop, located next to the games room.*



*The 'street' where many residents meet and children play.*



*The three story common house, located next to a set of flats.*

# Woongroep Lavendelstraat

- A unique variation of cohousing.
- Provides six apartments for temporary residents in need of a supportive environment for example a young adult with learning difficulties or someone who has recently come out of abusive relationship. These residents can stay for up to four years.
- The site is a narrow urban plot however the design still manages to create an internal street for community use.
- Work units form part of the development and can be accessed via the residential side of the building or via a separate entrance. This theoretically allows the common space to double as an event space although is usually only used by the residents.
- A good example of how cohousing can help provide a supportive, caring environment and make use of limited land.

## **Type**

Multigenerational

## **Tenure**

Private cooperative

## **Building**

Purpose built, mixed use

## **Density**

Suburban, medium/high density

## **Completed**

1989

## **Location**

Haarlem

The Netherlands



*The building is compact on a narrow urban site.*



*The internal street, with social space for residents to stop and meet.*



*The common kitchen*



*The common room*

# Centraal Wonen Houtwijk

- The main circulation area is wide enough to for residents to place furniture outside of their front door - blurring the boundaries between private and common space. Other circulation routes within the building wings are narrower, darker and come to a dead end. Therefore some circulation space functions better than other parts of the building.
- Generous number of common spaces distributed around the building rather than concentrated in a common house.
- The cohousing community used to be sub-divided into groups, each with their own common spaces. This has since changed and now all common facilities are used by all residents and the cluster groups no longer exist.
- The site encloses a central courtyard which clearly defines the space.
- The architecture has dated since construction, but the building still helps to facilitate a community atmosphere.

**Type**  
**Tenure**  
**Building**  
**Density**  
**Completed**

Multigenerational  
Housing association, social rent  
Purpose built, residential  
Suburban, high density  
1984

**Location**

Den Haag  
The Netherlands



*The central courtyard is partially open to the public, but still retains a feeling of enclosure and ownership.*



*The main circulation space provides enough space for tables, seats, furniture and plants. It is also possible to look down and speak to people on different levels.*



*The top circulation area is flooded with natural light.*



*One of many common spaces.*

# Vrijburcht

- The residents of Vrijburcht share facilities with a number of community organisations based in the same building.
- This is example of how of cohousing can be combined with other organisations. Well designed circulation spaces allows different occupants to benefit from different facilities at different times.
- A well equipped community theatre can also function as a dining hall, events space and cinema. The guest room uses the adjacent kitchen.
- In addition to the theatre, the site is also shared with a cafe, community nursery and work units which keeps the main courtyard active during weekdays.
- The building also includes specialist housing for adults with learning difficulties. This housing is not part of the cohousing community but benefits from the safe urban environment.

**Type**

Multigenerational

**Tenure**

Private

**Building**

Purpose built, mixed use

**Density**

Suburban, Medium Density

**Completed**

2008

**Location**

Amsterdam

The Netherlands



*A view of Vrijburcht from the bridge. The community theatre and cafe is located on the corner of the building.*



*A view from inside the central courtyard.*



*The community room set up as a theatre. The space can also facilitate many other functions.*



*There is both a private entrance and a public entrance to the theatre.*

# Centraal Wonen Hilversum

- The first purpose built centraal wonen project in the Netherlands.
- The building and community have aged well with a broad demographic spread.
- Still uses the original cluster structure in which clusters of five residential units share some common facilities.
- There are also a number of larger common facilities shared by the entire cohousing community.
- The design provides a high quality urban realm which is integrated into the existing suburban fabric. The physical design connects seamlessly with surrounding neighbourhoods.
- A key design feature is a winding street in which residents pass many common facilities and street activity. Each individual cluster common space has a high level of glazing to provide a two way visual connection with this community street.

**Type**

Multigenerational

**Tenure**

Housing association, social rent

**Building**

Purpose built, residential

**Density**

Suburban, low/medium density

**Completed**

1977

**Location**

Hilversum

The Netherlands



*View of a house from the main street.*



*A coffee morning in the sun. The main community common facilities can be seen in the distance.*



*A cluster of different house types.*



*Each cluster has a roof terrace above their common area.*

# Centraal Wonen De Bonvivant

- Common area forms links between three residential towers.
- Community has completely self contained guest apartment and has an additional room which can function as a meeting room or bedroom.
- Apartments were given small balconies deliberately to encourage residents to use the common gardens and roof terrace.
- The common roof terrace serves as a link between the three residential towers. The higher footfall generated by the circulation route results in a well used social space.
- Common area also includes some workspace rented by a local organisation.
- A folding partition wall separates the children's play room and the main dining space. This doubles the size of the event space for larger gatherings. The space also features a raised platform which can be used as a stage.

## **Type**

Multigenerational

## **Tenure**

Housing association, social rent

## **Building**

Purpose built, residential

## **Density**

Suburban, high density

## **Completed**

1989

## **Location**

Rotterdam

The Netherlands



*A large roof terrace is well used as it also provides a connecting link between the three residential towers.*



*The children's play room has a removable wall to double the size of the main common room.*



*The bar and dining room. On the other side of the removable wall is the children's play room with a raised stage.*



*A view of circulation space by the main entrance. Here there are a number of common facilities and a small number of offices rented by local organisations.*

# Woongroep Lugtensteyn

- Large internal circulation space creates generous additional common space. This space is unheated, but remains usable throughout the year.
- Common room has been made an architectural feature which consists of a raised glass cube. This room has an excellent visual connection with other common areas.
- High level of transparency between common areas in general.
- Doctors surgery located on ground floor of the building.

**Type**

Senior

**Tenure**

Housing association, social rent

**Building**

Purpose built, residential

**Density**

Suburban, medium density

**Completed**

2001

**Location**

Bilthoven

The Netherlands



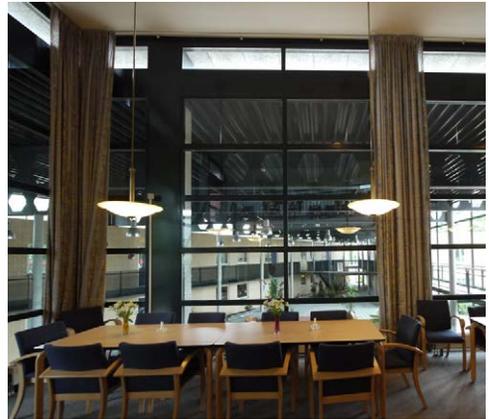
*There is a coffee morning each day at 11am. Resident's can come along whenever they like.*



*The main circulation space can also be used as common space.*



*A view of the main common room.*



*A view from within the main common room. This is a double height space, with a library above on a mezzanine floor.*

# Woongroep Het Kwarteel

- High quality circulation space
- Beautiful rural surroundings
- High quality construction, but limited common facilities in comparison with Dutch social rent cohousing projects.
- Common space features different materiality and architectural detailing
- Well positioned laundry space allowing residents to socialise, or wait in comfort while they finish their washing.
- Smaller, more intimate spaces have been created in the common room with the use of moveable furniture. This allows the room to remain flexible.

**Type**

Senior

**Tenure**

Private

**Building**

Purpose built, residential

**Density**

Semi-Rural, medium density

**Completed**

2003

**Location**

Culemborg

The Netherlands



*The architects have used different materiality and architectural detailing for the common house (brick) compared with the residential (timber).*



*The residents have created smaller spaces in the main common room using dividing furniture such as book cases.*



*The ceiling of common the room is sprayed with a special organic acoustic material. The room is rearranged for large meals.*



*The laundry room is well connected with the main common space.*

# Woonvereniging Voormekaar

- Example of a small senior cohousing project - only twelve households
- Very high quality common spaces. The main common space is constructed with plate glass and provides a focal point to the project. This space is well connected with the garden.
- The scheme was project managed by the group. This would have been more difficult with a larger group.
- Guest bedroom features bathroom designed to adapt as the residents age. This bathroom can be used by any resident when the guest room is not in use.
- The range of knowledge and professions in the group added real value to the project.
- The project also features high quality private houses and apartments.

**Type**

Senior

**Tenure**

Private

**Building**

Purpose built, residential

**Density**

Suburban, low/medium density

**Completed**

2007

**Location**

Boxmeer

The Netherlands



*The glazed common house is well connected to a beautiful garden.*



*Inside the main common space. An interior designer has integrated storage, a fireplace and kitchen counter to unify the rear wall and enhance the space.*



*Two residents playing table tennis outside the main common space. The use of plate glass creates a seamless connection with the garden.*



*The residential apartments feature high ceilings and mezzanine levels.*

# Seniorbofællesskabet Egebakken

- Houses are constructed using different combination of design modules. This allows a compromise between individual choice but has limited construction costs.
- The interior of the households has received special design attention with senior residents in mind.
- All households are single storey.
- Contemporary architectural design.
- Example of low density suburban senior cohousing.
- High quality common space, although the range of facilities is more limited than some other projects.

**Type**

Senior

**Tenure**

Private

**Building**

Purpose built, residential

**Density**

Semi-rural, low/medium density

**Completed**

2005

**Location**

Nødebo

Denmark



*Egebakken features contemporary architecture. Many of the houses are different, but use the same modules. This allowed client flexibility but kept construction costs within budget.*



*The exterior of the common house.*



*Inside the common house.*



*The inside of the common house is simple but provides a functional, flexible space.*

# Bofællesskab Munksøgård

- This project has a unique organisational structure.
- The community is sub divided into five groups of 20 dwellings. Each group has their own common house and central garden space.
- The dwelling groups have different types of ownership. One dwelling group is privately owned as single family houses, and one is a co-operative association (the residents own the houses collectively as an association but at the same time the residents also own privately a share of the house they occupy). Three of the groups are owned by a housing association. These provide rented accommodation and new tenants are selected by the existing residents. One of the three dwelling groups is only for young people, one is only for seniors, and one is open for all age groups.
- Each of the communities dines within their own common house and therefore this model does not have so many issues with children detracting from the dining experience of seniors which is a common difficulty found in multigenerational cohousing. Full multigenerational interaction occurs via the committees and work groups.
- The large scale of the project facilitates a shop, a cafe and a centralised heating system.
- The whole community has no large internal space to meet together.

## **Type**

## **Tenure**

## **Building**

## **Density**

## **Completed**

## **Location**

Multigenerational and Senior

Mixed

Purpose built, residential

Semi-Rural, low/medium density

2000

Roskilde

Denmark



*The main navigation sign at Munkesögård which shows the five dwelling groups, and the existing farm building in the centre. The central buildings include a community shop and cafe.*



*One of the five common houses. The common houses are similar, but each is slightly different.*



*Looking out from one of the entrances in the senior dwelling group.*



*Inside the senior dwelling group's common house.*

# Bofællesskab Jernstøberiet

- Excellent example of successful retrofit project
- Building uses existing Iron Foundry structure.
- The existing building provides a large hall which serves many functions.
- Some residences open directly into the common space.
- The common house containing an adult living room, a teen room, kitchen and dining area is constructed within the existing foundry hall. The main hall succeeds in providing a spatial overlap between these key spaces and a secondary, more general common space and the residential apartments.
- Later additions to the floor in the main hall provide sports markings and outline the defensible space of the apartments.
- The existing industrial sawtooth roof provides north light to the residential units.
- The initial project was developed on a tight budget. Many later additions and improvements have been made by the community over time. These collaborative tasks are considered an important part of building bonds between the residents.

**Type**

Multigenerational

**Tenure**

Private

**Building**

Purpose built, residential

**Density**

Suburban, low/medium density

**Completed**

1981

**Location**

Roskilde  
Denmark



*The existing foundry hall provides an excellent community space. The common house is constructed within the hall and can be seen in the image above. Some of the residences open directly into this space.*



*The living space, is located above the dining space. There is also a large well equipped teen room on the other side of the common house.*



*The dining space.*



*The kitchen has recently been refitted and improved. The kitchen looks out into the main hall so any residents arriving home can see who is cooking.*

# Bofællesskab Jystrup Savværk

- Glazed streets have a really positive influence on the community which are used as common space throughout the year (in addition to the main common spaces).
- The fronts of apartments have a high level of glazing to reduce the thresholds between the entrance of the residential apartments and the shared street.
- The common space is the focal point of the project both architecturally and functionally. The street intersects the main common space which means all residents pass through the common area when returning to their apartment.
- The architect has followed the site topography with lots of internal changes in levels. This creates an interesting internal space, but makes the project inaccessible to wheelchair users. The use of different levels is echoed in the apartments - many rooms are interconnected with stairs.
- Dividing the two streets with the common house in the centre has unintentionally divided the community into two different groups. The workshop and the craft/hobby room are located on different streets to act as anchors to encourage residents to visit the opposite street.

<b>Type</b>	Multigenerational
<b>Tenure</b>	Private
<b>Building</b>	Purpose built, residential
<b>Density</b>	Semi-Rural, low/medium density
<b>Completed</b>	1984
<b>Location</b>	Jystrup Denmark

- Residential units at the end of the streets have fewer residents pass by and are subsequently more private.
- Use of sleeping lofts in rooms with high ceilings maximises floor space.



*The rear approach to the common house. The teen room is located inside the tower.*



*Looking down from the first floor of the common house. The entrances to both streets can be seen at either side of the image.*



*The kitchen is well equipped and well connected with the dining area.*



*A view from inside one of the covered streets. The change of levels, planting and play areas add to the quality of the space.*

# Bofællesskab Lange Eng

- Unbalanced demographic, nearly all of the community consists of families with young children. It will be interesting to see if this demographic evens out over time.
- Change in architectural materiality between outside and inside of project.
- Central courtyard clearly defines common garden but houses lack private garden space.
- Houses and apartments have a large amount of glazing to the rear, facing into the central garden. This helps to blur the boundaries between private and common space.
- Houses feature split levels, which are architecturally attractive but make noise isolation difficult for families with children.
- High quality common space with well thought through signage and an good range of facilities.
- Bold, contemporary architectural design.

**Type**  
**Tenure**  
**Building**  
**Density**  
**Completed**

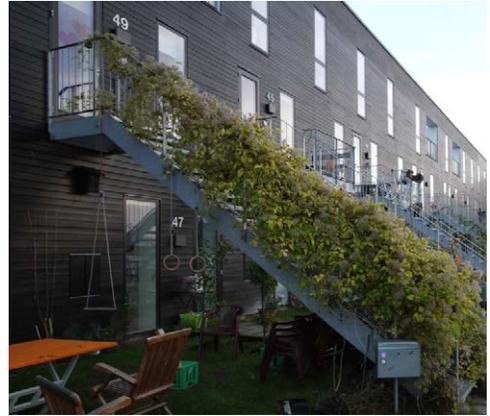
Multigenerational  
Private  
Purpose built, residential  
Suburban, low/medium density  
2008

**Location**

Albertslund  
Denmark



*A view from inside one of the family houses. There are a mixture of house/ apartment types to suit a varied demographic - although the majority of residents are families with young children.*



*A view from the outer side of the development.*



*A view of the central garden which has been specially landscaped to provide a range of more intimate spaces.*



*Inside the dining area of the common house.*

# Kollektivhusföreningen Färdknäppen

- First senior cohousing project in Sweden.
- Located in a central location of Stockholm.
- Has very high applicant demand, particularly due to desirable location. This means Färdknäppen has no difficulty attracting residents in the young-old age range.
- Main common space is contained on the ground floor of the building and the basement space below.
- The common space on the ground floor has a particularly successful layout which allows spaces and activities to overlap.
- A clear view of the entrance from the common space allows residents to look in as they arrive home.
- Basement common rooms are less successful because they lack natural light.

<b>Type</b>	Senior
<b>Tenure</b>	Housing association, social rent
<b>Building</b>	Purpose built, residential
<b>Density</b>	Urban, high density
<b>Completed</b>	1981
<b>Location</b>	Stockholm, Sweden



*Färdknäppen is located in a highly desirable central part of Stockholm.*



*The kitchen has been specially designed for a cohousing community.*



*The dining area.*



*The common space works particularly well because different spaces and activities overlap. Residents entering the building pass by this hub of activity which increases the opportunities for spontaneous interaction.*

# Kollektivhuset Kupan

- Common space connects two residential towers.
- Main entrance route leads directly through the centre of the dining area and past the kitchen entrance. This means all residents pass lots of activity on their way home and even have the option of arriving directly to the evening meal when returning from work. This arrangement creates a very welcoming atmosphere upon arrival.
- Extensive common facilities.
- Different rooms for toddlers, children and teenagers.
- The circulation space has sofas to allow parents to sit and talk whilst supervising younger children. It has been found that the older children tend to naturally supervise the younger children.
- High capacity commercial sized kitchen, but lacks the domestic feel of some other large cohousing kitchens.

**Type****Tenure****Building****Density****Completed****Location**

Multigenerational

Housing association, social rent

Purpose built, residential

Urban, high density

1986

Älvsjö

Sweden



*The common space consists of a central link (pictured), the two ground floor areas of the residential towers, and two roof terraces.*



*The main entrance leads directly through the dining area and past the main kitchen which means some residents can start dining as soon as they arrive home from work. This space creates a very welcoming and warming environment to anyone entering the building.*



*The kitchen is well equipped but is less connected to the dining space than other projects. The kitchen also feels somewhat commercial, rather than domestic.*



*There are different spaces for toddlers, children and teenagers.*

# Takoma Village Cohousing

- Site arrangement leads residents through the site, before reaching the common house. This is open to the public, but the space is clearly defined and well overlooked. The result is a welcoming, safe approach in a built up urban area.
- The common house forms the hub of several circulation routes. This means people often walk through the common space and can see any activity taking place. This provides good opportunities for spontaneous interaction.
- The project successfully combines a range of house types and facilities into a compact urban site.
- Main space in the common room is flexible and can be used for many different activities.
- The scale of this project works well.

**Type**  
**Tenure**  
**Building**  
**Density**  
**Completed**

Multigenerational  
Private  
Purpose built, residential  
Urban, medium density  
2001

**Location**

Washington DC  
USA



*The main common house.*



*Inside the common house during a meal.*



*View from the main road. The project is located in a suburban location adjacent to a metro line. The scale and massing of the project works well. This garden forms the approach to the common house.*



*The common house features a double height space and is the hub of several circulation routes which means residents are often passing through.*

# References

## Books, Journals and Reports

- Alexander, C. et al (1977) *A Pattern Language* New York: Oxford University Press
- Allen, G. & Hicks, J. (1999) *A Century of Change: Trends in statistics since 1900* Research Paper 99/111 Social and General Statistics Section London: House of Commons Library
- Atchley, R. (1982) 'Retirement as a social institution', *American Review of Sociology*, 8, pp.263-87
- Audit Commission (2008) *Don't stop me now. Preparing for an ageing population*, London: Trident Publishing
- Blanchard-Fields & Cavanaugh, J. (2006) *Adult Development and Aging* p.156, pp.186-7 New York: Thomas Higher Education
- Bookbinder, D. (1991) *Housing options for older people* London: Age Concern England p.15, p.32
- Brenton, M (2008) *The Cobousing Approach to 'Lifetime Neighbourhoods'* p.17 Housing Learning & Improvement Network: London
- Coffey, J. (2009) 'Homeshare Evaluation: 'Time of your life?' *World Homeshare Congress*, Paris, 3-5 July 2009
- DCLG, DoH, DWP (2008) *Lifetime Homes, Lifetime Neighbourhoods: A national strategy for housing an ageing society* London: DCLG
- Durrett, C. (2009) *Senior cobousing handbook: a community approach to independent living* Philadelphia: New Society Publishers p.15, 17, 23, 42
- Foucault, M. (1975) *Discipline and Punish: The Birth of the Prison* Harmondsworth: Penguin 1979
- Fox, K (2004) *Watching the English* p.208 London: Hodder and Stoughton Ltd
- Fraser, D (2002) *The Evolution of the British Welfare State* 3rd Revised edition London: Palgrave Macmillan
- Fromm, D (1991) *Collaborative communities: cobousing, central living, and other new forms of housing with shared facilities* New York: Van Nostrand Reinhold; London: Chapman and Hall

- Girouard (1978) *Life in the English country house : a social and architectural history* London: Yale University Press
- Grandparents Plus (2009) *Rethinking Family Life: exploring the role of grandparents and the wider family* London: Grandparents Plus
- Griffin, J (2010) *The Lonely Society* Mental Health Foundation: London
- Griffin, J. & McKenna, K. (1998) 'Influences on leisure and life satisfaction of elderly people', *Physical & Occupational Therapy in Geriatrics*, 15(4)
- Griffith, M. (2011) *We Must Fix It, Delivering Reform of the Building Sector to Meet the UK's Housing and Economic Challenges* London: Institute for Public Policy Research IPPR
- Hagestad, G & Neugarten, B (1985) 'Age and the life course' in R. Binstock & E. Shanas (Eds.) *Handbook of aging and the social sciences* pp.35-61. New York: Van Nostrand Reinhold
- Help the Aged (2008) *Spotlight Report 2008: Spotlight on older people in the UK* p.13 London: Help the Aged
- Hoglund, J. D. (1985) *Housing for the elderly: privacy and independence in environments for the aging* p.2, 5 New York; Wokingham: Van Nostrand Reinhold
- Homes and Communities Agency (2009) *HLAPPI Report: Housing Our Ageing Population: Panel for Innovation* London: Homes and Communities Agency
- Kerr, R. (1856) *The Gentleman's House: How to Plan English Residences* London: John Murray
- McCamant, K & Durrett, C (1988) *Cobousing: A Contemporary Approach to Housing Ourselves* USA: Ten Speed Press p.136, 165
- McCamant, K. and Durrett, C. (2011) *Creating Cobousing: Building Sustainable Communities* Canada: New Society Publishers p.13
- More, T. (1516) *Utopia* New York: P. F. Collier & Son
- Muthesius, H (1904) *Das Englische Haus* translated and edited edition *The English House* published in 1979 p.3, 79, London: Crosby Lockwood Staples
- Muthesius, S. (1982) *The English Terraced House* p.39, 185. pp. 248-249 Yale University Press: London

- Pearson, L.F (1988) *The Architectural and Social History of Cooperative Living* London: The Macmillan Press p.11, p.72, pp.188-201, p.212
- Purdum, C. B. (1913) *The Garden City: A Study in the Development of a Modern Town* pp.98-104 London: J.M. Dent & Sons Ltd
- RIBA Journal (July/August 2011) *Accommodating the third age: Designing for older people* London: Royal Institute of British Architects
- Robson, D. (1998) *Homes for the Third Age: Design Guide for Extra Care Sheltered Housing* London: Spon Press
- Rowson, I. (1985) 'Status and role change through the life cycle' in R. Binstock & E. Shanas (Eds.) *Handbook of aging and the social sciences* p.693 New York: Academic Press
- Shield, R (1988). *Uneasy endings: Daily life in an American nursing home* New York: Cornell University Press
- Simpson, D. (April 2011) 'The Longevity Revolution and Other 'Tales of Aging'' in *Volume #27 Aging: Fight or Accept* pp.14-16 Amsterdam: Stichting Archis
- Simpson, D. (April 2011) 'The Villages' in *Volume #27 Aging: Fight or Accept* Amsterdam: Stichting Archis pp.32-8
- Sparks (1955) Letter from C.H. Sparks, to the *RIBA Journal* April 1955
- Steel, C. (2008) *Hungry City: How Food Shapes Our Lives* London: Random House
- Tuckman B, (1965), 'Developmental sequence in small groups' in *Psychological Bulletin* 63 384-99
- Volume #27 (April 2011) *Aging: Fight or Accept* Amsterdam: Stichting Archis
- Webb, A.D. (1911) *The new Dictionary of Statistics of the World to the Year 1911* p.301 London, G. Routledge and Sons; New York, E.P. Dutton and Co
- White, W. H. (1877) 'Middle Class Houses in Paris and Central London' in *Sessional Papers of the Royal Institute of British Architects* 1877-8, pp.21-65

## Newspaper Articles

‘Quango cuts: 177 bodies to be scrapped under coalition plans’ *The Telegraph* 8 January 2012

‘Elderly ‘robbed of dignity’ by failing social care services’ *Telegraph Money* 8 January 2012

‘Millions to see private sector pensions reduced’ *Telegraph* 8 July 2010

‘Where would you like to retire?’ *Guardian* 18 August 2011

‘Government accepts care costs cap’ *Independent* 03 July 2011

‘Cost of care in old age rises to average of £50,000’ *Guardian* 21 March 2011

‘Generation gap ‘could undermine society’” *Observer* 21 September 2008

‘Britain ‘to scrap retirement age’ *Guardian* 12 May 2002

## Online Sources

Berger S (2010) '*Scandinavian Cohousing - report on conference and visits to communities*' *Cohousing Network* <<http://www.cohousing.org.uk/node/322>>  
[accessed 5 December 2013]

British Library (2011) '*The Workhouse*'  
<<http://www.bl.uk/learning/histcitizen/georgians/poverty/georgianpoverty.html>>  
[accessed 14 October 2013]

Higginbotham, P (2004) '*The History of the Workhouse*'  
<<http://www.workhouses.org.uk/intro/>>  
accessed 2 November 2013]

Lifetime Homes (2010) *Lifetime Homes Design Criteria 5 July 2010 Revised*  
<<http://www.lifetimehomes.org.uk/>>  
[accessed 15 July 2013]

Office for National Statistics (2011) '*Topic Guide to Older People*'  
<<http://www.statistics.gov.uk/hub/population/ageing/older-people>>  
[accessed 28 October 2013]

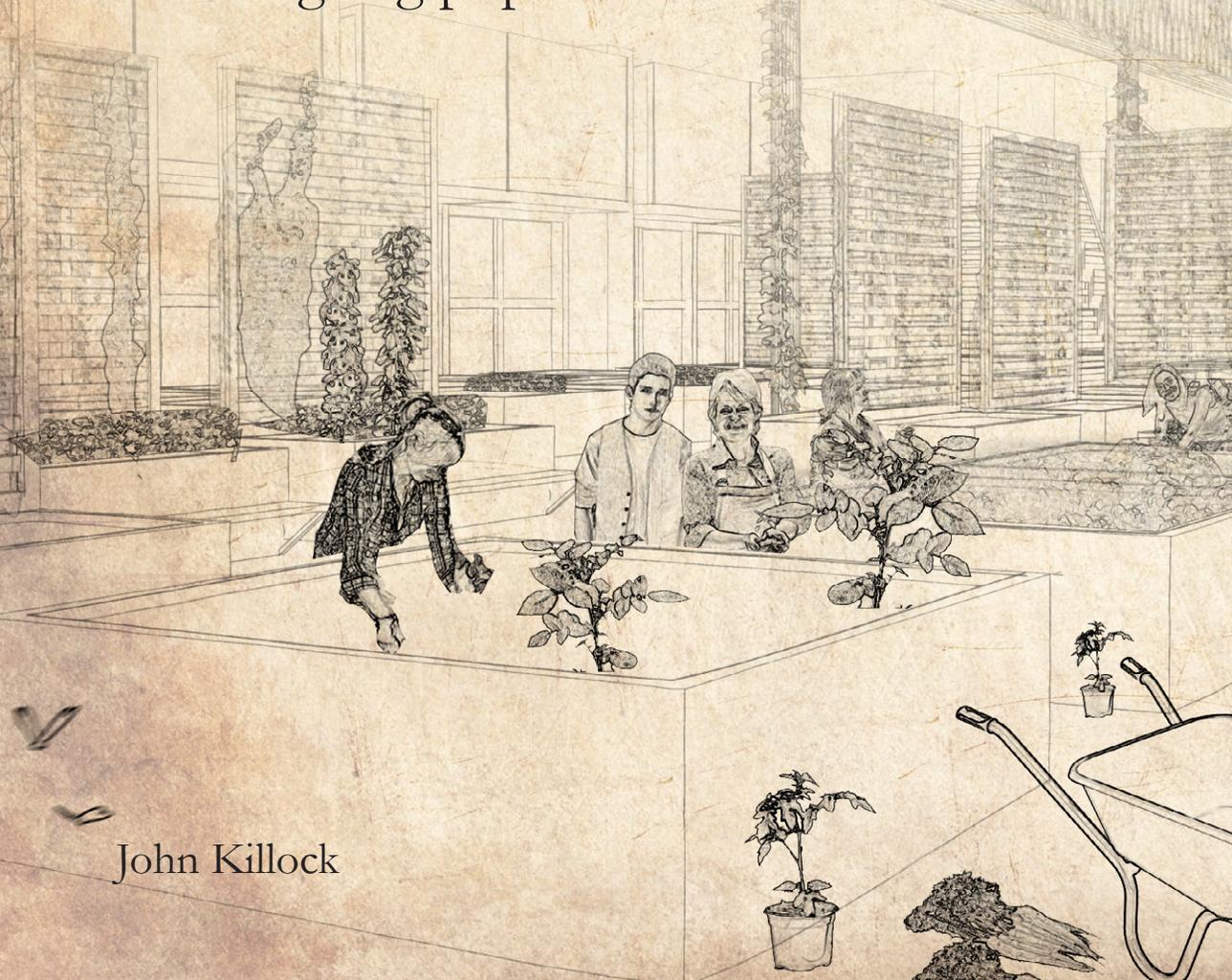
Richardson, R (2010) '*Nuclear family 'in decline', figures show*' *BBC News 2 July 2010*  
<<http://www.bbc.co.uk/news/10487318>>  
accessed 4 November 2013]

# Bibliography

- Alexander, C. et al (1977) *A Pattern Language* New York: Oxford University Press
- Atchley, R. (1982) 'Retirement as a social institution', *American Review of Sociology*, 8, pp.263-87
- Audit Commission (2008) *Don't stop me now: Preparing for an ageing population*, London: Trident Publishing
- Blanchard-Fields & Cavanaugh, J. (2006) *Adult Development and Aging* New York: Thomas Higher Education
- Bookbinder, D. (1991) *Housing options for older people* London: Age Concern England p.15, p.32
- Brenton, M. (2008) *The Cohousing Approach to Lifetime Neighbourhoods* Housing Learning & Improvement Network: London
- DCLG, DoH, DWP (2008) *Lifetime Homes, Lifetime Neighbourhoods: A national strategy for housing an ageing society* London: DCLG
- Durrett, C. (2009) *Senior cohousing handbook: a community approach to independent living* Philadelphia: New Society Publishers p.15, 17, 23, 42
- Foucault, M. (1975) *Discipline and Punish: The Birth of the Prison* Harmondsworth: Penguin 1979
- Fox, K. (2004) *Watching the English* p.208 London: Hodder and Stoughton Ltd
- Fraser, D. (2002) *The Evolution of the British Welfare State* 3rd Revised edition London: Palgrave Macmillan
- Fromm, D. (1991) *Collaborative communities: cohousing, central living, and other new forms of housing with shared facilities* New York: Van Nostrand Reinhold; London: Chapman and Hall
- Girouard (1978) *Life in the English country house : a social and architectural history* London: Yale University Press
- Grandparents Plus (2009) *Rethinking Family Life: exploring the role of grandparents and the wider family* London: Grandparents Plus
- Griffin, J. (2010) *The Lonely Society* Mental Health Foundation: London
- Griffin, J. & McKenna, K. (1998) 'Influences on leisure and life satisfaction of elderly people', *Physical & Occupational Therapy in Geriatrics*, 15(4)
- Hagestad, G. & Neugarten, B. (1985) 'Age and the life course' in R. Binstock & E. Shanas (Eds.) *Handbook of aging and the social sciences* pp.35-61. New York: Van Nostrand Reinhold
- Harrison, L and Means, R (1990) *Housing: the essential element in community care* Anchor Housing Trust Ltd: RAP Ltd: Oxford
- Help the Aged (2008) *Spotlight Report 2008: Spotlight on older people in the UK* p.13 London: Help the Aged

- Hoglund, J. D. (1985) *Housing for the elderly: privacy and independence in environments for the aging* p.2, 5 New York; Wokingham: Van Nostrand Reinhold
- Homes and Communities Agency (2009) *HAPPI Report: Housing Our Ageing Population: Panel for Innovation* London: Homes and Communities Agency
- McCamant, K. & Durrett, C. (1988) *CoHousing: A Contemporary Approach to Housing Ourselves* USA: Ten Speed Press p.136, 165
- McCamant, K. and Durrett, C. (2011) *Creating Cohousing: Building Sustainable Communities* Canada: New Society Publishers p.13
- Muthesius, H. (1904) *Das Englische Haus* translated and edited edition *The English House* published in 1979 p.3, 79, London: Crosby Lockwood Staples
- Muthesius, S. (1982) *The English Terraced House* p.39, 185. pp. 248-249 Yale University Press: London
- Peace, S. and Holland, C. (2001) *An Ageing Society: Innovative Approaches* Bristol: The Policy Press
- Pearson, L.F (1988) *The Architectural and Social History of Cooperative Living* London: The Macmillan Press p.11, pp.188-201
- Purdom, C. B. (1913) *The Garden City: A Study in the Development of a Modern Town* pp.98-104 London: J.M. Dent & Sons Ltd
- RIBA Journal (July/August 2011) *Accommodating the third age: Designing for older people* London: Royal Institute of British Architects
- Robson, D. (1998) *Homes for the Third Age: Design Guide for Extra Care Sheltered Housing* London: Spon Press
- Rowsow, I. (1985) 'Status and role change through the life cycle' in R. Binstock & E. Shanas (Eds.) *Handbook of aging and the social sciences* p.693 New York: Academic Press
- Shield, R (1988). *Uneasy endings: Daily life in an American nursing home* New York: Cornell University Press
- Simpson, D. (April 2011) 'The Longevity Revolution and Other Tales of Aging' in *Volume #27 Aging: Fight or Accept* pp.14-16 Amsterdam: Stichting Archis
- Simpson, D. (April 2011) 'The Villages' in *Volume #27 Aging: Fight or Accept* Amsterdam: Stichting Archis pp.32-8
- Steel, C. (2008) *Hungry City: How Food Shapes Our Lives* London: Random House
- Tuckman B. (1965), 'Developmental sequence in small groups' in *Psychological Bulletin* 63 384-99
- Young, M. and Lemos, G. (1997) *The communities we have lost and can regain* London: Lemos and Crane
- Vestbro, D. (2010) *Living together - Cohousing Ideas and Realities Around the World: Proceedings from the international collaborative housing conference in Stockholm 5-9 May 2010* Stockholm :Uuniversitetsservice US AB

# Is cohousing a suitable housing typology for an ageing population within the UK?



John Killock