

# COOPERATIVE HOUSING SYSTEMS

*an elective module in 4th Year Architecture*

incollaboration with Dublin Housing Co-Operative  
and  
Cl ú id Housing Association  
and



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## CO-OPERATIVE HOUSING SYSTEMS - ELECTIVE OUTLINE

This elective in the Spring Semester in 4<sup>th</sup> Year Architecture with nine students explored alternative systems around the procurement and delivery of housing, particularly the co-operative movement. Focusing on housing as a system rather than how the finished product looks, the students firstly attended lectures around the topic and then researched precedents of cooperative housing. Later they worked collaboratively with the Dublin Housing Cooperative and Cluid Housing Association on a range of issues related to urban dwelling on a site in Great Charles North in Dublin's north inner city. The workshops were all designed and run collaboratively in an attempt to empower the students and the civic community participants on the crucial issue of housing design and procurement. In addition the students participated in joint lectures on the Urban Economics module in the School of Surveying and Construction Management as well as engaging with the Oikonet Housing Research Network.

# Module Descriptor

Habitation is one of the most important social needs in our lifetime yet its provision for all seems to allude our society including here in Ireland. 'Housing bubbles', which often ruin economies, lead to housing crises which ruin so many lives. Options for accommodation delivery are mostly based on the free market, whether they be in the private or the almost non-existent social and affordable sector. The prevailing procurement methods have clearly failed to meet such a basic need yet alternative options are limited and are not encouraged by government or the private sector.

## AIM OF MODULE

This elective in the Spring Semester in 4<sup>th</sup> Year Architecture with 6-10 students will explore alternative systems around the procurement and delivery of housing, particularly, but not exclusively, the co-operative movement. It focuses essentially on housing as a system rather than how the finished product looks.

It is divided into two parts:

### 1. Lectures, Synthetic Research and preparatory activity

Lectures will focus on systems of housing production over the last 100 years or so and students will be expected to research one system in one country and write a reflective text. There will also be collaboration with 4<sup>th</sup> year students and staff from the School of Construction Management at DIT on their UrbanEconomics Module. Shared lectures between the two programmes will focus on both historical and current exemplars of integrated housing and also Irish housing policy to include social housing history and delivery;

the private rental sector; housing, austerity and neo-liberalism etc. The lectures will address future housing needs in terms of building typology, delivery, location and demand. Economics Module. Shared lectures between the two programmes will focus on both historical and current exemplars of integrated housing and also Irish housing policy to include social housing history and delivery; the private rental sector; housing, austerity and neo-liberalism etc. The lectures will address future housing needs in terms of building typology, delivery, location and demand.

### 2. Participatory workshop and outputs (group work)

For the second part of the elective we will engage with a community group in workshops to devise a housing strategy (or system) on a specific site to satisfy their habitation needs. This will involve two or three workshops with the group assisting them to develop their brief, exploring design, strategy and system options and then reverting with a feasibility or series of sketch and/or model studies in poster and/or booklet form.

The intention is to work with people in housing need, learn from them, use our knowledge and skills to explore options with them and to leave them something useful which they can use to progress their procurement process. It is intended that the Urban Economics class will attend the final presentation.

## OIKONET COLLABORATION

The elective will also engage with the Civic Housing Workspace on the Oikodomus digital platform. This will involve uploading specific tasks and responding online to any comments from Oikonet colleagues.

## LEARNING HOURS AND CREDITS

12 contact, 88 self-learning and 5 ECTS

## OBJECTIVES OF MODULE

- To examine the multidisciplinary and collaborative nature of housing production and procurement
- To enlighten students on the centrality of housing in creating sustainable communities and cities and a stable but dynamic society
- To reflect on exemplar housing systems in Ireland and Europe
- To review innovative alternative solutions to Ireland's housing crisis
- To work with one community group on a particular housing need and site and develop a strategy and / or sketch scheme with funding model
- To publicise results with an exhibition, pamphlet etc. to add to the narrative on housing provision in Ireland.

- To advise Government bodies on alternative procurement routes for housing
- To share the teaching and learning experience and collaborate with European colleagues in the EU funded Oikonet Housing Research Network
- To have fun exploring alternative pedagogical methods of creating housing systems

## LEARNING OUTCOMES

At the end of this module the students will be able to:

- Identify different housing systems and markets
- Situate housing in a broader social and economic context
- Apply different housing procurement methods to different locations as the broader circumstances dictate
- Work with interest groups in the identification and delivery of suitable housing using appropriate procurement methods and their design skills
- Work with a community group on exploring alternative options for their housing needs

## ASSESSMENT / STUDENT DELIVERABLES

A series of A3 study sheets on a chosen relevant research topic

and

A series of group exercises related to the collaborative workshops to be presented as a booklet and a Power Point presentation.

## READING LIST

Alexander, Christopher A Pattern Language

\* Awan, N., Schneider, T. and Till, J. 2011. Spatial Agency. Second half of book has a list of alternative ways of doing architecture including related to housing.

\* Walter Segal - Various articles in Architect's Journal - <http://www.segalselfbuild.co.uk/home.html>

\* Rod Hackney and Community Housing, various e.g. see Hall, Peter (1988), Cities of Tomorrow  
Habraken, John (1961), Supports, an alternative to Mass Housing. Holland.

<http://www.spatialagency.net/database/john.habraken>

\* Turner, John (1972) UK, Freedom to Build – dweller control of the building process.

<http://www.spatialagency.net/database/john.turner> See also Hall, Peter (1988), Cities of Tomorrow.

Ward, Colin (2004), The Hidden History of Housing

Sirr, Lorcan ed. (2014), Renting in Ireland

Oikonet references:

<https://www.youtube.com/watch?v=Q3EYOMPnUow>

[http://arc.housing.salle.url.edu/oikonet-platform/public/upload/source/20150914143142\\_ProceedingsofthefirstOIKONETinternationalconference.pdf](http://arc.housing.salle.url.edu/oikonet-platform/public/upload/source/20150914143142_ProceedingsofthefirstOIKONETinternationalconference.pdf)

<http://www.oikodomos.org/workspaces/index.php/workshops/preview/19>

\* = highly recommended reading

# Lecture Series

Week 1: Intro and discussion around aspirations for elective

Week 2: CLASS TRIP

Week 3: Tues 10 February: JR; Ballinfoile Feasibility for Galway City Council by SHA 12 February; JR meets Dublin Housing Cooperative

Week 4: Tues 16 February; Dominic Stevens (Guest); Walter Segal Method Wed 17 February; JR; Pruitt Igoe and Ballymun; perceived housing failure

Week 5: Tues 23 February; Colin Mc Donnell (Guest); Co-Housing

Week 6: Wed 02 March: Joint class with Lorcan Sirr/JR; Housing Policy and contemporary issues in housing

Week 7: Wed 09 March; Geoff Corcoran and Dermot Sellars (Guest); Co-operative Housing in Ireland

Week 8: Tues 15 March; Antoinette Hayden (Guest); Clúid Housing Association Wed 16 March; Skype seminar with Leandro Madrasa and Angel Coco

**EASTER HOLIDAYS**

**EASTER HOLIDAYS**

Week 9: Wed 06 Apr; joint class with Lorcan Sirr/JR; The procurement system for York Street Housing for DCC

Week 10: Tues: students Power Point presentations on chosen topic of research Wed 13 Apr;

**SITE VISIT AND WORKSHOP 1**

Week 11: Work on Co-op group needs (group work)

Week 12: Work on Co-op group needs (group work)

Week 13: Work on Co-op group needs (group work)

Week 14: Work on Co-op group needs (group work)

Week 15: 16 May: **WORKSHOP 2** - interactive collaborative workshop with members of

Week 16: 24 May: **WORKSHOP 3** - interactive collaborative workshop with members of

Week 17: Exhibition of group work for DSA SHOW16 the Dublin Housing Cooperative and Cluid Housing Association the Dublin Housing Cooperative and Cluid Housing Association

# Research Topic

Students were asked to research and present alternative systems around the procurement and delivery of housing (outside of the market system of housing provision), particularly but not exclusively, the co-operative movement.

# Students' Research Topic

Cloughjordan EcoVillage, Ireland  
Andrew Mc Allister

The Walter Segal Method, A Co-operative construction typology  
Benjamin Cooney

60 Richmond Street, Toronto  
Emma Conway

Tinggarden, Denmark & Vrijburcht, Netherlands  
Holly Carton

R50, Berlin-Kreuzberg  
John Flynn

Co Housing model for Sweden  
Kieran Brady

The History of Co-Operative Housing in Denmark  
Shane Madden,

West Whitlawburn Housing Co-operative, UK  
Yi Shi





Ecovillages are urban or rural communities of people who strive to integrate a supportive social environment with a low impact way of life. To achieve this, they integrate various aspects of ecological design, permaculture, ecological building, green production, alternative energy, community building practices, and much more. The means by which an ecovillage grows and evolves are as follows:

#### Community aspects

- Recognising and relating to the needs of the local community.
- Sharing common resources and providing mutual aid.
- Emphasising holistic and preventative health practices.
- Providing work by fostering ecological business ideas.
- Promoting unending education.
- Fostering cultural expression.

#### Ecological aspects

- Growing food as much as possible within the community bio-region.
- Supporting organic food production.
- Creating homes out of local materials where possible.
- Using village based renewable energy systems.
- Protecting biodiversity.
- Fostering ecological business principles.
- Assessing the life cycle of all products used from an ecological point.
- Preserving clean soil, water and air through proper waste management.
- Protecting nature and safeguarding wilderness areas.

#### Cultural aspects

- Shared creativity, artistic expression, cultural activities and celebrations.
- Sense of community unity and mutual support.
- Shared vision and agreements that emphasise the cultural of community.

#### Cloughjordan – Critical analysis

Overall, I find the cloughjordan eco village to be hugely successful and innovative as a green alternative to modern day living. However, from visiting the site four time over the past five years I've found there to be a huge lack of architectural coherence among the newly constructed homes and buildings. Each house is somewhat unique in its own way, but in turn creates a mish-mash of materials and building types. The earlier homes are all built to a certain quality, but as the recession hit, the newly constructed homes seem to be built with less thought about materials. There is an newly constructed enterprise center which provides a great service to the eco-village and cloughjordan as a new community enterprise, but it is constructed to the back of the development and is very out of scale, constructed from industrial materials.

In the early years of the scheme, residents had to pay high amounts to access the group water heating systems as there weren't enough residents to spread the cost. It has since leveled out as the development is about 70% complete.



Andrew Mc Allister - Dublin School of Architecture, DIT, Dublin, Ireland.  
COOPERATIVE HOUSING SYSTEMS ELECTIVE / CIVIC HOUSING WORKSPACE



## THE SEGAL METHOD

Walter Segal (1907 - 1985)

Born in Berlin, Germany.

Studied Architecture in Berlin and Delft, Netherlands.

Moved to London in 1936.

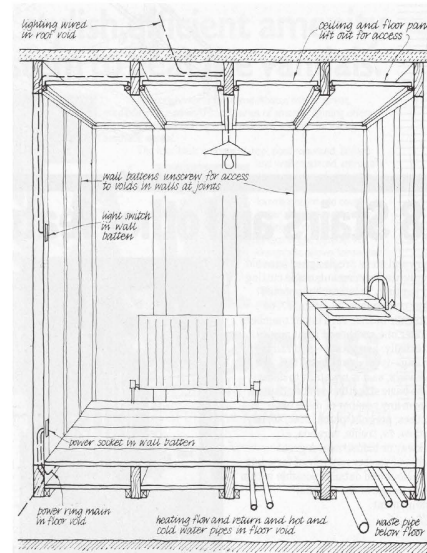
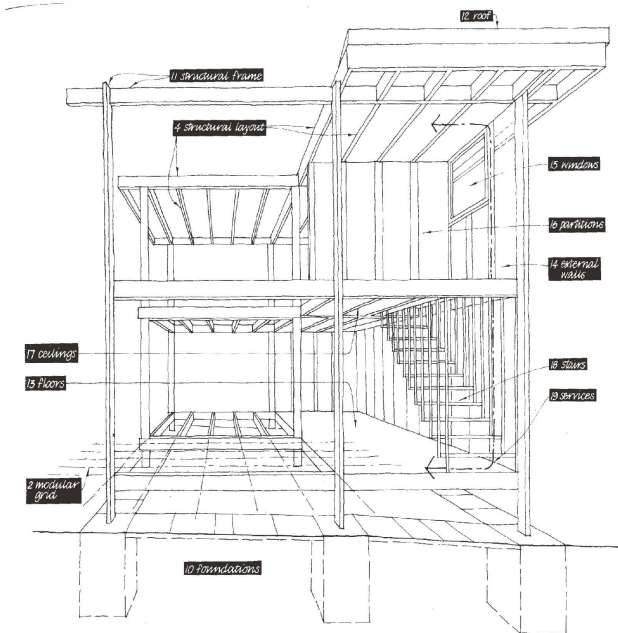
Studied and taught at the Architectural Association  
School of Architecture.

In 1962, after settling down with his second wife, Segal built a temporary accommodation for his family in their back garden while renovations were being carried out on their home. It is here that Segal questioned how buildings are designed, built and relate to their users. He used this project as a testing ground for a quick economic model of construction. This developed into a self-build housing system based on, but not limited to, timber-framed construction.

Impressed by the speed and practicality of the method of construction, Segal received a series of clients who wanted to use this same method across two dozen private houses in England and Ireland. Successes with this method also reached Germany in the form of a students' residence called Bauhaule, in Stuttgart, which the students themselves designed and built under the supervision of Segal in 1981. Furthermore, according to Broome (1986), a Segal style house was even designed and built in Australia in 1980 via two long telephone calls between Segal and the Australian based client.

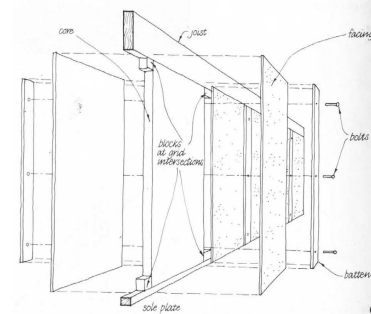
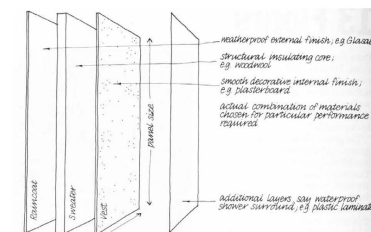
Segal's ideology was to empower any individual in creating their own home using the materials readily available to them and their bare hands. This typically meant timber elements that are easily movable and fixed together without any wet construction needed. His drive was to provide every self-builder with basic plans, sections and instruments that described the sequence of construction. Once the positioning of the timber frame, services and circulation core are set, internal module panels can be positioned in the desired arrangement of the builder. The construction would therefore be lightweight and demountable with screwed or bolted dry joints, giving the owner the ability to extend, change and improve their home for many years to come. It also meant that any home under this method would have an extended lifespan due to the ease at which elements could be replaced after damage or wear.

The Segal Method also incorporated a modular grid, usually a standard size of material like a span of a timber beam. This made for easy calculations and kept waste to a minimum. Foundations and ground-works were also kept to a minimum. Due to the system of using materials and techniques that are readily available, rather than specially manufactured, the Segal Method's pedagogy remained open to all regardless of lack of income, capital or building skills.



above  
Voids incorporated in construction allow for flexible services

below  
External Walls with non-structural infill clamped onto structural frame



Bauhaule exterior view. Ph. Peter Burcell Jones



Dining in Bauhaule. Ph. Peter Burcell Jones

above  
Bauhaule, Student Self-built Housing Scheme

below  
'Walter's Way', Lewisham, London



Houses built using the Segal system. Ph. Chris Mawby

### References:

AWAN, N., SCHNEIDER, T., TILL, J., (2011). *Spatial Agency: Other Ways of Doing Architecture*. London, Routledge.

BROOME, J. 5th November 1986, *Architecture Journal*.

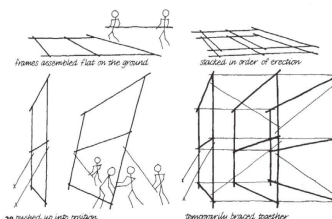
above

### The Method

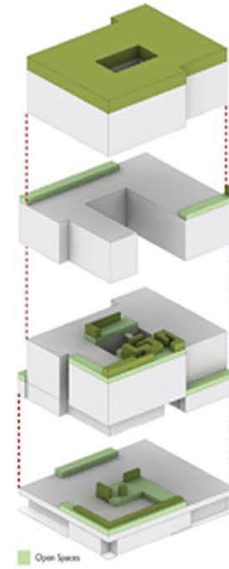
1. General Arrangement
2. Modular Grid
3. Layout Drawings
4. Structural Layout
5. Calculations
6. Framing Drawings
7. Schedule of Materials
8. Catalogue of Elements
9. Building Instructions
10. Foundations
11. Structural Frame
12. Roof
13. Floor
14. External Walls
15. Windows
16. Partitions
17. Ceilings
18. Stairs & other Features
19. Services

below

Cross framed with rigid joints constructed flat on ground before lifted into place







## 60 Richmond Street Cooperative Housing Scheme.

Richmond Street has a mix of subsidized rental units and affordable rental units. Toronto community housing cooperation subsidize units meaning tenants pay rent based on 30 % of household income this is also known as a "rent - geared- to -income" scheme.

The remaining units are to be affordable rental units. The rent is set at or below market rent current affordable rents are :

1. Bachelor unit : 822 Dollars
2. 1-Bed : 979 Dollars
3. 2-Bed : 1161 Dollars

The Toronto city council grant authority entered a 50 year less a day lease with the Toronto Community Housing coop for the city owned property at 60 Richmond Street.

### References:

1. [www.arch.mcgill.ca](http://www.arch.mcgill.ca)
2. [hospitalitytrainingcentre.com](http://hospitalitytrainingcentre.com)
3. [www.arch-daily/60richmond street.com](http://www.arch-daily/60richmond street.com)

**Co-operative Housing System Elective**  
**4th year Architecture DSA/D.I.T**  
**Emma Conway**

# A comparison Between Tinggarden and Vrijburche

## Tinggarden

This was one of the first co-housing schemes in Denmark, Dating 1971 only 3 years younger than the oldest scheme seatedammen (1968) Tinggarden was completed in 1977.

These sort of schemes were a reaction against the modernist high-density apartments. Hugely referencing the article by Bodil Graae in 1967, "every child should have one hundred parents."

This is a part of a small movement of low rise- high-density houses.

The scheme was the winner presented by Vandkunsten (architects) of a competition in 1971 run by the Danish ministry of housing

It uses pre-fabricated panels with painted wood and brick facades.

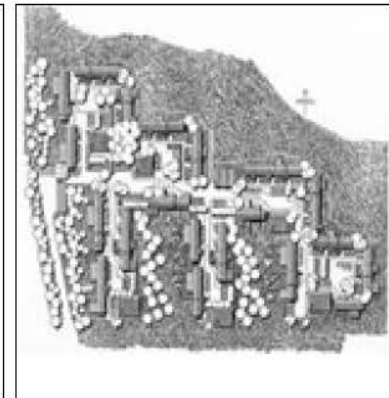
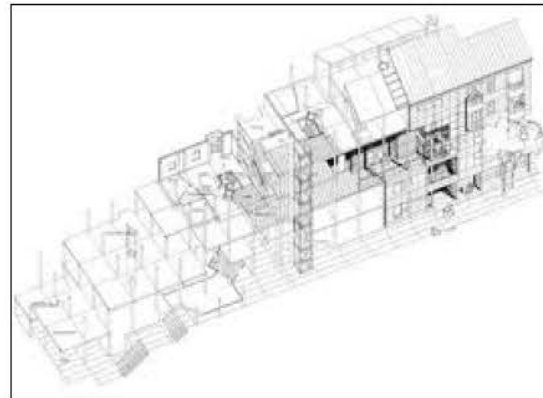
Due to the construction and the open plan it allows for flexibility that encourages the owner to make his or her own changes creating a sense of "user freedom"

There is one communal house and each group of six family houses has its own common house. There are four housing typologies within the original scheme. The average size of the houses are 87m<sup>2</sup>.

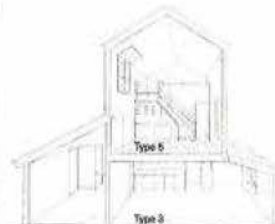
The original was such a success that a second Tinggarden was created with apartments, this time every 12/17 apartments' had a common apartment.

Cooperative Housing Systems Elective  
Holly Carton

4th year architecture DSA/DIT



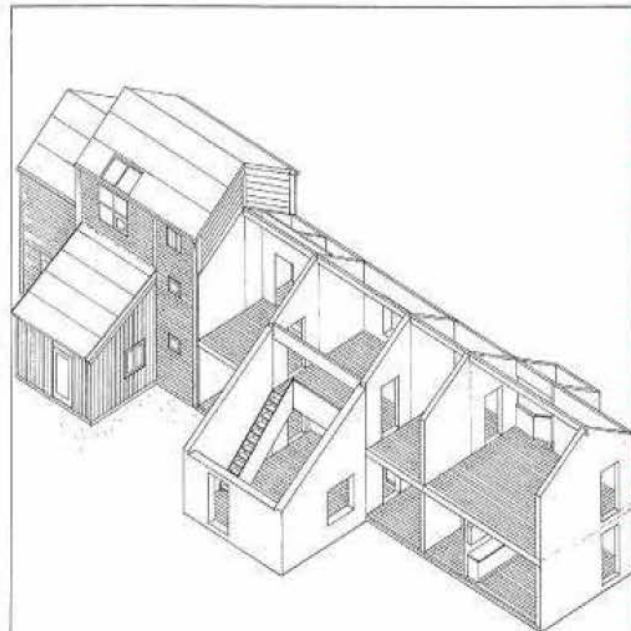
Type 5, 1:200.



1:200



Type 8, 1:200.





## Vrijbruche

This project was the Grand vision of "the Anarchist Architect"

It translates as : free castle

Hein De Hann was the architect. He lived there until his death in 2015

He said in relation to Vrijbruche: "If you ever need to return to the centre for theatre and cafe, it is a typical suburb, a place only to sleep because everyone's day at the office and evening hangs in the centre of the city." He advocated strongly for a mix of commercial and living.

The apartments are waterfront and a 15-minute drive to the city. They could have been to the highest bidder. However, Hein De Hann wanted a community and did not want a sleeping suburb.

There are 52 residential homes 12 of these have studios to allow artists to work from home.

There are six flats for people with intellectual disabilities.

There is a crèche for 48 children.

A café, a theatre, a crafts room, a sailing jetty, a harbour as well as a common green, a conservatory, a guest house, and offices.

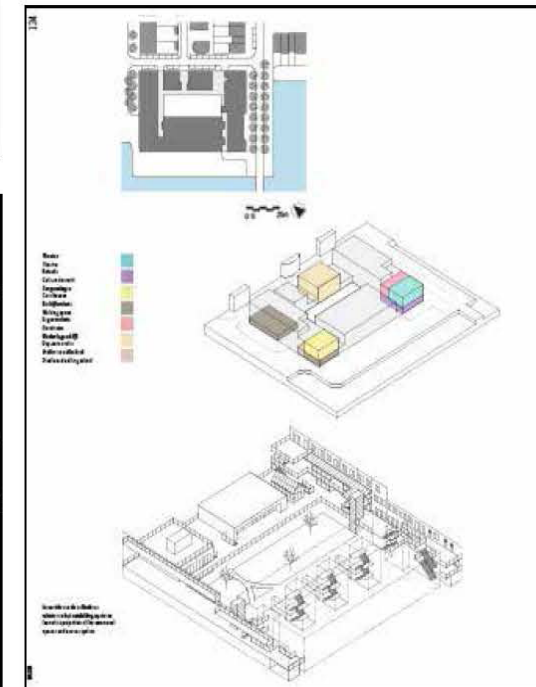
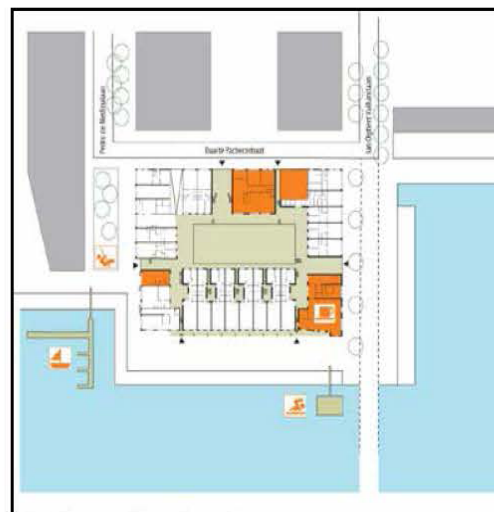
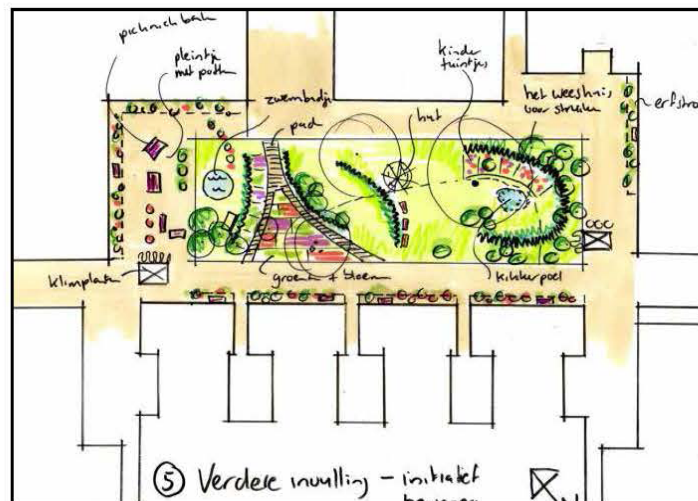
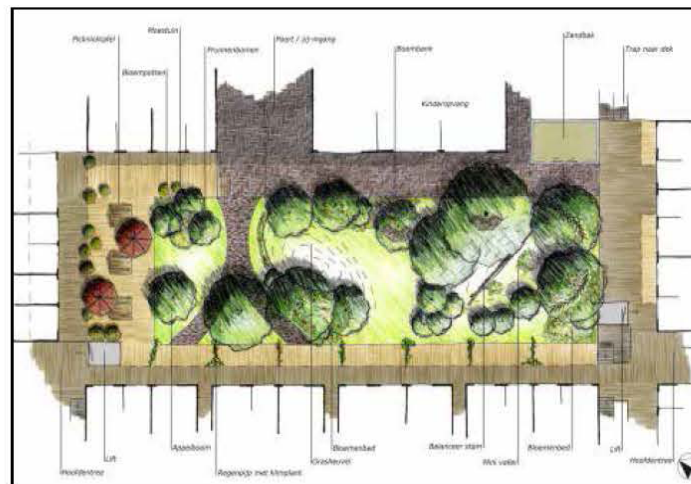
The original anarchist intention was that the community could run all the different aspects; however the theatre, café, sailing jetty and the crèche have become commercial.

The two projects are similar to the extent that they are both clearly co-housing schemes. At a quick glance, they are both similar. However, the theories are as different as can be, and at the same time, they are trying to fix the communities.

The Tinggarden scheme was a reaction against modernism. They realised that they needed to raise the densities but disliked the high-rise apartments they wanted to return to community and homes and family. They realised the failures in modernism but disagreed with where post-modernism was going. The competition for Tinggarden was that for new housing typologies and schemes.

The Vrijbruche community was a self-build by and anarchist. He wanted an anarchist community that could run themselves without need for the market to cover or the government to steer. The community still uses the facilities that he created but the market had to step in when the community would not step up.

I would say that out of the two of them, Tinggarden did what it set out to do. Tinggarden created a precedent for a new housing typology. Vrijbruche tried to be an anarchist community and failed.





R50 COOPERATIVE HOUSING PROJECT

OIKONET

CO - OPERATIVE HOUSING ELECTIVE

Project Description:  
R50 Cooperative Housing  
Development

Location:  
Berlin

Year of Construction:  
2013

Architects:  
Ifau & Jesko Fezer,

**No. of Units:**  
This building has 19 bespoke  
apartments

**Private Space:**  
Each apartment was designed for  
the person who bought it.

**Communal / Shared Space:**  
All residents enjoy the use of a  
garden area, a covered outdoor  
area at basement level and a

two-storey communal space, as  
well as a utility room, a workshop  
and the roof terrace with summer  
cooking facilities. The 80-centi-  
metre peripheral balconies also  
belong to the community.

**Construction Details:**  
Modular Timber Façade + a  
simple reinforced concrete frame  
+ exposed service run

**Owner Demographic:**  
The residents are all artists or  
architects.

**Financing Model:**  
The Berlin Senate Department  
for Urban Development, as well  
as the Umwelt Bank funded this  
project. Each of the people living  
in the development bought the  
apartments from plans.



Site plan  
scale 1:7000



\*Image Reference 02 Detail concept magazine 2014/03 p249-251



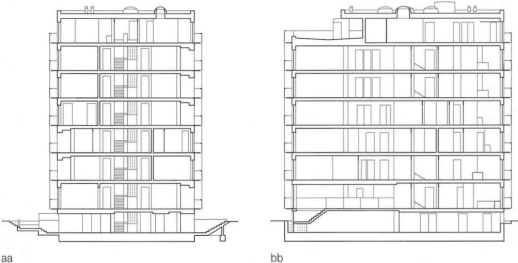
\*Image Reference 05 Detail concept magazine 2014/03 p249-251 - Accessed April 12 2016



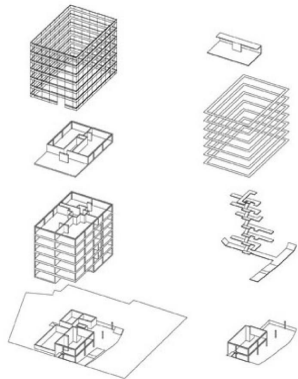
- 9 Parents' room
- 10 Child's room
- 11 Dining room
- 12 Living room
- 13 Study
- 14 Dressing room
- 15 Dining/Guest room
- 16 Bedroom/Study
- 17 Reading space
- 18 Terrace
- 19 Personal fitting out

Second floor

\*Image Reference 06 Detail concept magazine 2014/03 p249-251 - Accessed & Modified April 12 2016



\*Image Reference 07 Detail concept magazine 2014/03 p249-251 - Accessed April 12 2016



\*Image Reference 08 Detail concept magazine 2014/03 p249-251 - Accessed April 12 2016



JOHN A FLYNN C12711861

### Cohousing in Sweden

#### Introduction

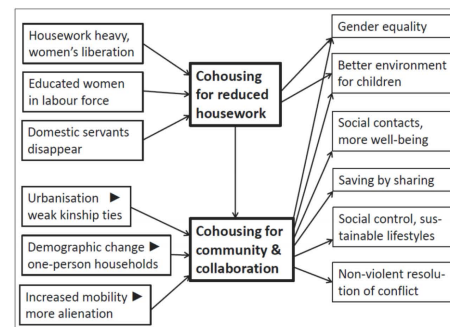
"Cohousing is defined as housing with common spaces and shared facilities". As part of this the focus is on projects where each household has its own private apartment. In Swedish context eco-villages do not consider themselves cohousing, as well as students and persons living with disabilities, even though they do fulfill the definition of cohousing.

In Sweden the word "Kollektivhus", (collective building), is the most frequent used term for housing with shared facilities. When the term was launched in the 1930's, the aim was to reduce women's housework in order for them to be able to retain employment even when they married and had children. (Wohnbund, 2015)

'One of the differences between Sweden and other cohousing movements is that most of the properties are state owned unlike places like Denmark which are mainly private initiatives. (Caldenby, 1984).

#### Early Examples

The first collective housing units in Sweden were not based on a cooperation between tenants but on the division of labour. Tenants were served by employed staff. Tenants themselves were not meant to do any house chores, this probably led to the labeling of collective housing as a 'special solution for privileged people' (Vestbro, 1982). The first types of collective housing were set up to reduce the need for hiring of too many domestic servants and create shorter working hours for the workers. Thus with these bias in place it remained difficult to get any government subsidies at this time.



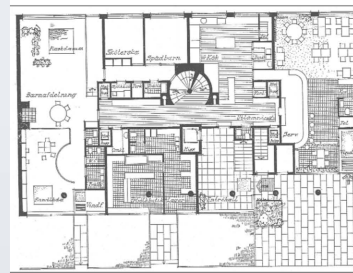
Cause and effect of Swedish model

#### John Ericssonsgaten Collective

The first modernist collective house in Sweden was built in 1935 at John Ericssonsgaten in Stockholm. Despite having small apartment sizes the complex did not attract working class households and the majority of the occupants consisted of middle class intellectuals. (Waagensen and Rubin, 1949)

At another such project known as the Hasselby family hotel, in "1969 the hotels owner began to shut down the collective services such as the restaurant. It was at this time a group of residents got together and began cooking for themselves in the restaurants kitchen".

They soon set out developing a model for cooperation, that involved communal purchase of food, division into cooking teams and selling of meal tickets, as a method of dividing out the workload. this model became known as the 'Self-work Model'



Ericssonsgaten Collective plan

#### 'Self-Work Model'

At this time the idea had already been presented by a group of professional women who maintained that house work was part of women's culture and should be regarded as a valuable contribution to society, the group was known as B.I.G (stood for live in community). They stated that cooking and child rearing with others would make it more enjoyable and also save time. (Berg et al, 1982). In the 1960s many married women in Sweden began to work outside of the home and demanded kindergartens and other forms of services.

"In the BIG model, 15 to 50 households was considered to be an optimal size for the new type of cohousing", if all households accepted a reduction in apartment space of 10percent than common areas could be made available for communal activities and costs would remain the same in construction. (Berg et al, 1982).



### Cohousing in Sweden

The first example of the new model was built at Stacken near Gothenburg in 1979. Tenants for Stacken were recruited through advertising and their apartments were tailored to their own needs. a central kitchen, dining room and nursery were arranged on the fifth floor , placing these facilities on a higher floor reinforced that these facilities were for communal use but not for use by outsiders. Tenants set up a new administrative service in order to get full control of the maintenance, recruitment of tenants and use of communal spaces. (Caldenby and Wallden, 1984)

Usually each individual adult would cook in a team of two once every second week, with the tasks taking up to 3 hours. Other tasks like cleaning of communal rooms, gardening and minor repairs are split up equally as well.

In all around 50 cohousing were built in Sweden during the 1980s, a dozen of these were later decollectivized, mainly due to the mixing of young families with care dependent pensioners, whom were unable to benefit from the integration. This was partly down to the share of work not being able to balance through the generational divide.

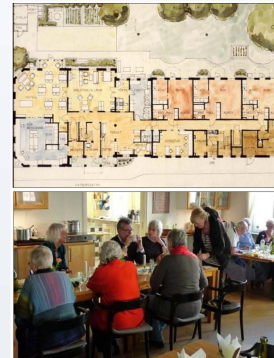


Stacken Collective housing

#### Second half of Life Model

As cohousing development declined in Sweden another model appeared, namely called the 'second half of life model'. It was set up by a group of seniors in 1987, it was designed where individuals above the age of 40 and without children could live together, help each other socially, get a better quality of life and be less dependent on other services and carers.

The first example was set up in Fardknappen in Stockholm with the help of the Swedish planning agency. "A special agreement with the housing agency stipulates that the Cohousing association manages the common areas" with other agreements set in place to provide care for people with disabilities by the local council. (Wohnbund, 2015)



Fardknappen Collective Model

#### Current Situation and Conclusion

As of 2014 there were 43 functioning cohousing in Sweden. 26 function as originally planned while 17 have reduced services; Communes and eco-villages are not included in these numbers. Of the 43, 8 are second half of life units. 33 were new builds and they make up 2000 apartment units, which is roughly 0.05 per cent of the total housing stock in Sweden. (kollektivhus.nu 2016)

Cohousing in Sweden evolved from a need to support social structure in a changing workplace. This need was brought about by the demand of woman for gainful employment, as well as a willingness for the reduction of household tasks with the creation of a suitable environment for raising children in. The success of cohousing in Sweden was limited to urban situations, as unlike other European counties most cohousing projects relied on public funding rather than private start ups. The 'second half of life model' is a fine example of how cohousing can be implemented into the housing market, it sets a precedence of how care units could possibly be designed in future models.

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<http://www.kollektivhus.nu/english>
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1<sup>ste</sup> Januar 1880.

# Arbejdernes Byggeforening,

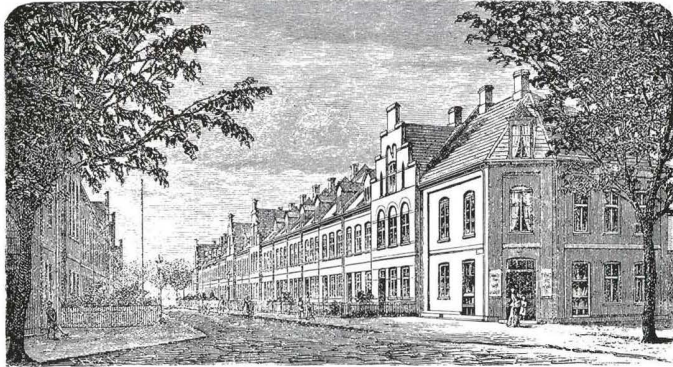
stiftet af Burmeister & Wains Arbejdere, d. 20 Novbr. 1865.

Husene fordeles til Eje blandt Medlemmerne ved Bortlodning.

Foreningen optager nye Medlemmer af alle Samfundsklasser, af begge Køn og enhver Alder.

Bidraget er 35 Øre ugentlig for én Andel.

Tæller nu 9365 Medlems-Andele. — Opsamlet Kapital: ca. 990,000 Kr. Har opført 319 Huse.



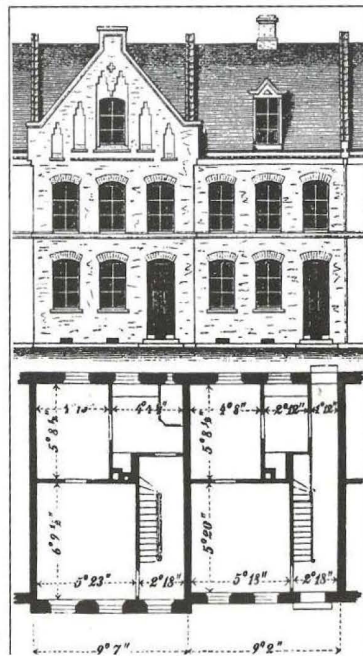
En Gade af Byggeforeningens Huse ved Østerfarimagstvej.

## Introduction

The first attempt to build a Danish cohousing community began in the winter of 1964 when Danish architect Jan Gudmand-Hoyer gathered a group of friends to discuss current housing options. As early as 1968, Gudmand-Hoyer was working with a group to develop a more collective and integrated cohousing project. Known as the Farum Project, the design called for dwellings for families and singles clustered around an interior common area including a school, all connected by a glass covered Pedestrian Street.

At a housing exhibition in 1970, this proposal attracted the interest of several non-profit housing developers. Meanwhile in 1971, the Danish Building Research Institute sponsored a national design competition for low-rise, clustered housing. All of the winning proposals emphasized common facilities and resident participation in the design process. The competition was well publicized and had a tremendous impact on the Danish housing debate. Five years later, Tinggarden, the first rental cohousing community, was completed, designed by the winning architectural firm Vandkunsten, sponsored by the Institute, and

built by a non-profit housing developer. By 1982, twenty-two owner-occupied cohousing communities had been built in Denmark.



Elevation and Plan of Co-operative housing by the "Workers Building Society"

## History

The First Co-operative housing can actually be dated back to the mid-19th Century as developers began to realise that a booming economy in Copenhagen brings opportunity for development substantial profit for them. Around this time the land prices began to soar due to the high demand for living accommodation and land for development, this forced developers into designing high rise and high density living accommodation for the new population. Consequently this led to very compact living conditions which were described at the time as "virtually slums in tall buildings, close together, without common amenities".



Site Plan of Proposed Farum Project, 1968

At this time, Ferdinand Ulrick, the District Medical officer for the Christianshavn quarter of Copenhagen, was observing the living accommodation of the English miners and how towns were established as an approach to building high quality affordable housing for the influx of new workers in Copenhagen.

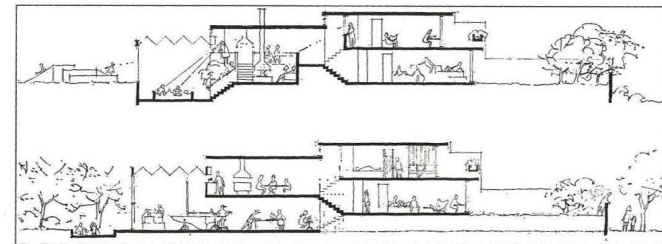
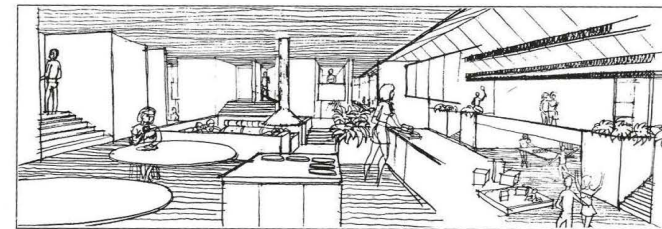
He first pitched his new philosophy to the shipyard workers of Copenhagen, known as the "Workers Building Society", which led to the first Co-operative housing scheme. Members of the society agreed to pay a very small amount of money into a fund on a monthly basis. When the fund reached a certain amount the

society would buy land for development. As dwellings were completed a lottery took place to determine who would get the finished houses.

Once the family would move in, they would continue to pay the same fee on a monthly basis until the entire cost of the house was met at which point they would take full ownership of the house. Members had the option to opt out of the Co-operative after a ten year period if they had not yet received a home, at which they would receive their entire contribution plus any interest. Although the Co-operative was initiated by the "Workers Building Society" of the shipyard workers, it was open to people from all walks of life.

The houses were two storey however the top floor was built to be a separate apartment as the owner was obligated to rent the space to a family that was still waiting for a home within the Co-operative. The projects however did not contain the use of common facilities and the Co-operative living areas as of today and of projects previously developed

during this time in Denmark such as the Brumleby Project 1853 and Classen Project in 1866. Eventually these houses began to be highly sought after properties as owners began to put them on the market making substantial profits with only the more prosperous in Copenhagen being able to afford them. In the Mid-1960s, while Copenhagen was exploring projects of mass scale and community occupation, groups were experimenting in the philosophy of Co-operative housing that we know today with smaller communities building closer together and sharing communal amenities. This led to much experimentation as to what level of community living is optimal for living, the ratio between families and common facilities. A variety of options were tested, from fully equipped dwelling with low use of communal space to minimally equipped accommodation with a high use of communal space. Over the years of typology experimentation, there is no clear way to distinguish which form is the optimal design for Co-operative development, with each ratio of family to communal living having achieved both success unsuccessful aspects.



Section and Perspective View of Proposed Farum Project, 1968

## The History of Co-Operative Housing in Denmark and the impact of Cultural Changes over time



STUDENT NAME: Shane Madden , 4TH Year Architecture, DSA / DIT

COOPERATIVE HOUSING SYSTEMS ELECTIVE / CIVIC HOUSING WORKSPACE



## Jystrup Savvaerk

Built in 1984, Jystrup Savvaerk is seen as an example of illustrating how successful and effective trading personal space for the use of more communal space can be.

The typology of the building is an L-shape single two storey construction containing individual personal spaces either side of the glass enclosed central "street". The communal area is located to the central joint corner of the development containing kitchen, living areas, laundry rooms, workshops, hobby and music rooms as well as guest rooms.

With government subsidies not allowing for additional spending allowance on common areas (of which account for 40 % of Jystrups Savvaerk total floor area), the design was offset by creating very small individual dwellings subsequently leaving very small floor area for private living.

The enclosed street by skylight glazing also allows for extra floor area to be utilised for communal living throughout the year.

With such high demand on communal shared living within this model, not all people have thrived and have thrived and being acceptance of the model, with such a high expectation on participation and voluntary work, particularly with high emphasis on shared meal times. Everyone from the age of ten years old must participate in the making of meals within the Co-operative with six separate meal groups in rotation throughout the year. The new meal group for the week meets on Saturday with all residents and plan the meals for the next week and buy the food.

Of the original 21 families that moved into the Co-operative when it was established, 5 still remain. Any new prospective residents must meet with a committee, consisting of the two neighbours adjacent to the house, a resident from across the street as well as the committee chief. After a formal interview takes place, the prospective owner attends a Friday dinner, a workday and a business meeting. This is to allow all existing residents to meet the prospective owner as well an opportunity for them to experience life within the Co-operative.



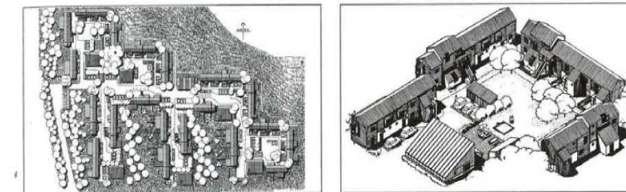
## Tinggarden

Located South of Copenhagen and built in 1974, Tinggarden is the result of a design competition for alternative settlements organised by the Danish Government who required the need for an alternative, smaller industrial development on the wake of the energy crisis that gripped Europe at this time.

The apartments have a flexible design layout allowing for adaptability allowing residents within each building to expand or shrink their house over time as they so desire. With this process of adaptability, this means that the adjoining apartments can gain rooms

In 1972, many projects similar to the co-operative in Tinggarden, looked for the support and ideas for housing in which the residents would be given the initial responsibility. However, as the design phase progressed it became clear that the owners could not be responsible for the crucial decision making required, particularly in a design process new to most at the time. Therefore after the initial decisions and design meetings had taken place the final decisions were left to the architects, who eventually redesigned significant portions of the proposal.

The development is arranged in small rows of houses clustered around a central communal space. Each building contains an individual common area containing the kitchen, living and service spaces.



OIKONET

## Tubbervaenge

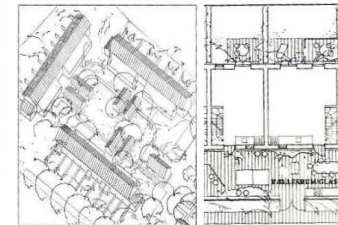
Tubbervaenge Co-operative is located south of Copenhagen. Built in 1984, the Architects formed a concept derived from a previously designed co-operative housing scheme using a technique of creating a greenhouse "overcoat" between the exterior and the internal living spaces which in turn creates a communal living space for the dwelling houses.

The Dwelling are subsidised rental units modelled of traditional Danish housing. Unlike previous examples, this co-operative housing scheme contains individual and fully equipped living units with individual and therefore more personal living and dining accommodation while also containing their separate private gardens to the rear of the house.

Unlike the previous two case studies, participation in communal activities within the co-operative is entirely voluntary, with some occupants taking more of an advanced role in the activities than others.

The project at Tubbervaenge has proven to be very successful, particularly in social terms, with all residents of the co-operative taking full advantage of the communal living space within the greenhouse structure, many of whom attempt to prolong the annual use of the space by using storage heaters in the colder winter months.

In the following years, the development of Tubbervaenge has furthered with the additional housing units being built adjacent to the existing site. Residents of the existing housing were given the opportunity to help and develop the new scheme; particularly on the positive and negative effects the living accommodation has impacted on their living. One of the main design decisions to feature out of this collaboration was the relocation of the communal greenhouse living accommodation to the centre of the housing project with housing flanking either side, interestingly similar to that previously designed and studied at Jystrup Savvaerk.



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STUDENT NAME: Shane Madden , 4TH Year Architecture, DSA / DIT

COOPERATIVE HOUSING SYSTEMS ELECTIVE / CIVIC HOUSING WORKSPACE



# West Whitlawburn Housing Co-operative

## 1. History of WWHC

In the 1980s West Whitlawburn was a dreadful place where it has poor quality house and bad local services.

Due to the poor situation of this area, in 1989 the tenants decided to make it into a better environment. They received funding from Glasgow City Council which was over £50 million for improvements to this area. This then formed the West Whitlawburn Housing Co-operative. The plan included the complete renovate of 6 apartments and local community centre as well as the installation of CCTV's on the site. An extra one hundred new terraced houses were built.



Source: <http://www.wwhc.co.uk/>



West Whitlawburn Housing Co-operative is located in Whitlawburn, Cambuslang, South Lanarkshire, Scottish, UK.

<https://www.vitalenergi.co.uk/blog/decc-visit-biomass-project/>

## 2. Development



Multi-storey and low rise properties before improvement work



Multi-storey and low rise properties after improvement work

Source: West Whitlawburn Housing Co-operative Ltd 1989-2010, 21st Anniversary Report to Members

**1989/90** The Co-operative is formed and the early staff are recruited. The Co-operative's own policies and procedures begin to be developed.

**1990/91** The development programme begins with low rise improvement work contracts.

**1994/95** Work to all of the low rise flats is completed. Work begins on the multi-storey security contract as this is a community priority.

**1996/97** The Concierge services are up and running. The Co-operative also buys the old school annex and the resource centre is opened with lottery funding.

**1997/00** Work progresses in the multi storey blocks with rewiring and lift renewal contracts. Community benefit projects are developed and delivered by the resource centre.

**2001/10** The first fabric work begins at Benmore Tower and is rolled forward until Roslin Tower is completed in 2010.

**2007/09** From buying the land to finishing the building of the houses, the 100 new houses are developed over this time.

**2009** Whitcomm, the first of its kind in the UK communications Co-operative is up and running.

**2010** the development programme is completed

Table 1-WWHC housing units

Type	1989 Number	2010 Number
2 apartment multi storey flat	0	13
3 apartment multi storey flat	432	106
4 apartment multi storey flat	0	13
2 apartment low rise flat	0	3
3 apartment low rise flat	78	68
4 apartment low rise flat	30	41
2 apartment cottage flat	0	16
3 apartment house	0	50
4 apartment house	0	29
5 apartment house	0	5
<b>Total</b>	<b>540</b>	<b>644</b>

Source: WWHC 21st Anniversary Repport to Members, 2010

### 3. System of tenure

WWHC is a mutual housing co-operative. Each tenant is a member of the co-operative and only tenants can be members therefore they own and manage the co-operative.

The tenancy agreement does not grant members the right to purchase the housing and the co-op retains the unit after the tenancy agreement is ended.

The highest part in WWHC is the management committee. The management committee's role is to hire employees to efficiently and successfully manage the co-operative and to act in the best interests of the membership as a whole. The member of the co-operative can stand for election to the committee and members are voted in one member/one vote democratic process. In effect, the management committee fulfils the role of the board of directors in a conventional enterprise.



Source: <http://www.wwhc.co.uk/>

### 4. Social benefits

WWHC adheres to the co-operative values and principles, particularly principle number seven (concern for community) and its status as a Registered Social Housing provider means that WWHC takes its social responsibilities very seriously.

Every couple of years, WWHC conducts a Tenant Satisfaction Survey to ascertain the level of satisfaction tenants have with the services provided.

### 5. Additional Services

In 1995, WWHC acquired funding from the National Lottery Charities Board and constructed the West Whitlawburn Community Resource Centre. The centre acts as a hub for the local community and provides vital services such as:

- Out of School Care Service for the children of parents who work during the day
- Café
- Citizens Advice outreach centre
- Two youth clubs

Reference:

<http://www.wwhc.co.uk/about-us/background/>

West Whitlawburn Housing Co-operative Ltd 1989-2010, 21st Anniversary Report to Members



DUBLIN SCHOOL OF ARCHITECTURE  
Collaborative Design Workshop 1

THE DUBLIN HOUSING  
CO-OPERATIVE

*In association with*

clúid  
housing



The intention of the first collaborative workshop was for everyone to get know each other, visit the site and partake in a series of reflective discussions on the meaning of urban dwelling and collective housing. The purpose was for the students to both learn, and gather information, from the cooperative group members. Hence a series of questions were posed to small discussion groups and the results recorded on post-its. The results are shown in the following pages.

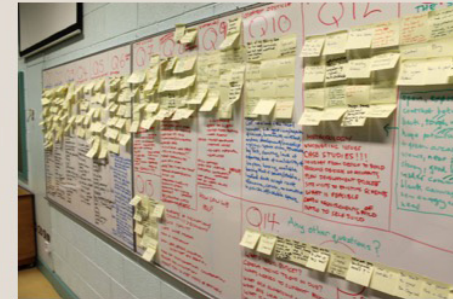
## SITE VISIT 13.04.16

## CHARLES STREET GREAT



## WORKSHOP 1 13.04.16

## DIT BOLTON STREET

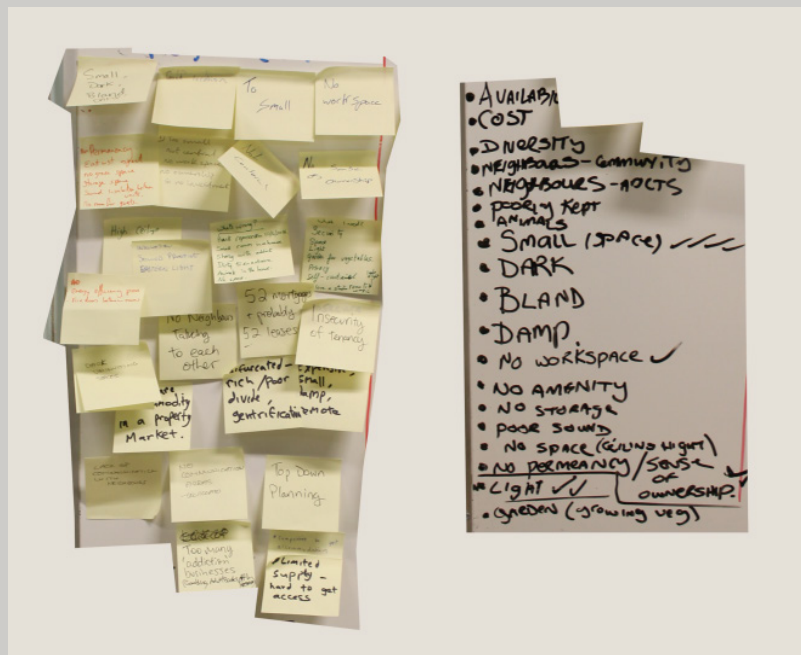


## COMMUNITY GROUP INFO

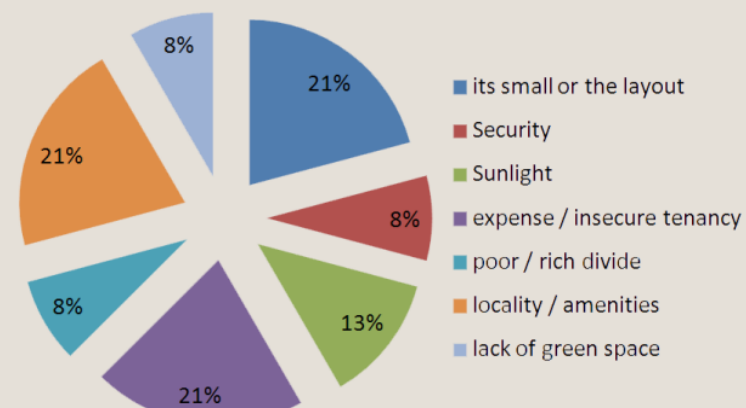
- 6 Members of Co-op housing in attendance, 5 male 1 female
- Age demographic 29 – 49
- 5 single or unmarried, 1 married, no families present
- Mixed working situations, Full time, part time, student and unemployed.
- Some members require assistance with mobility or special needs.
- Mix of housing units desired, with 2-3 bed and 1 bed being most popular with possible duplex living.
- Bicycle or public transport preferred method of transport, 1 car user.



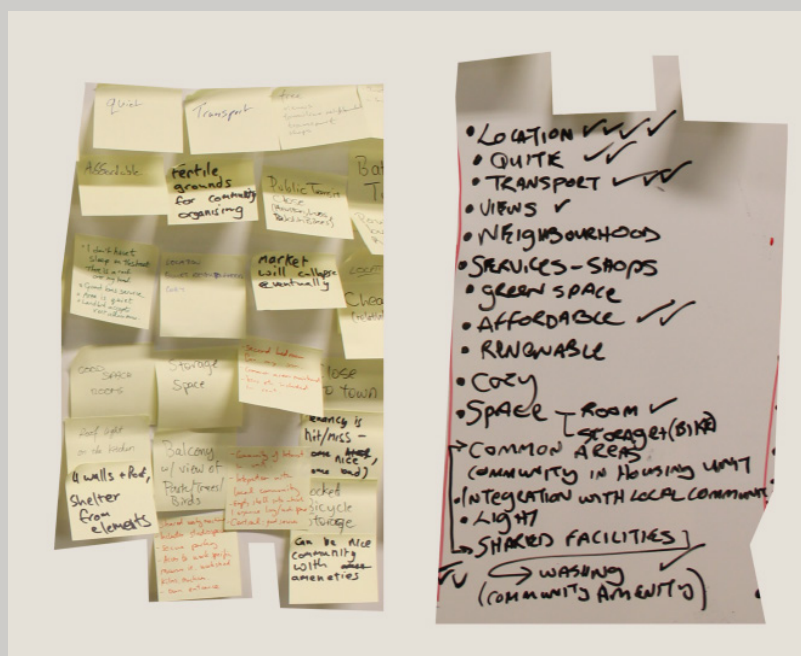
WORKSHO  
RESU



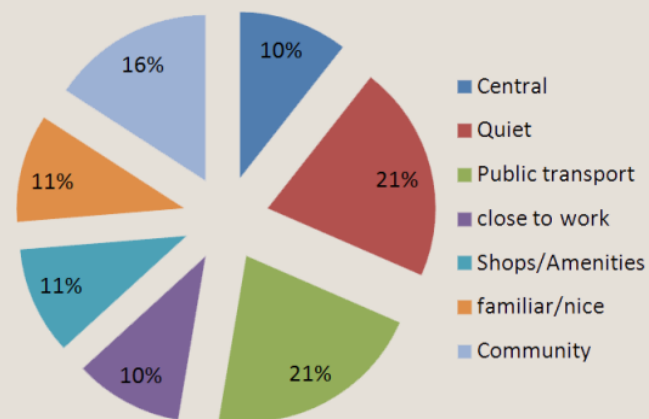
## QUESTION 1 : WHAT ARE THE NEGATIVE ASPECTS OF YOUR CURRENT DWELLING?



Q1:RESPONSES



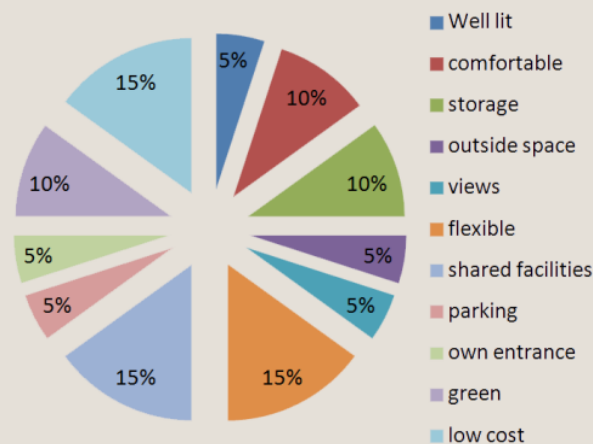
## QUESTION 2a : WHAT ARE THE POSITIVE ATTRIBUTES OF YOUR CURRENT DWELLING (LOCATION)?



Q2:RESPONSES

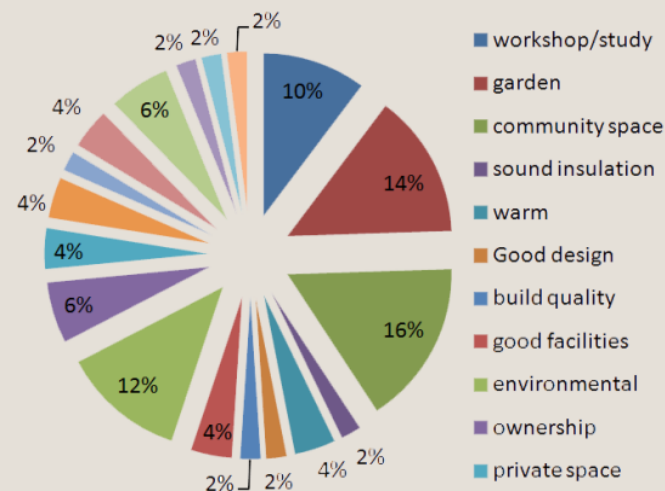


## QUESTION 2b : WHAT ARE THE POSITIVE ATTRIBUTES OF YOUR CURRENT DWELLING (HOME)?

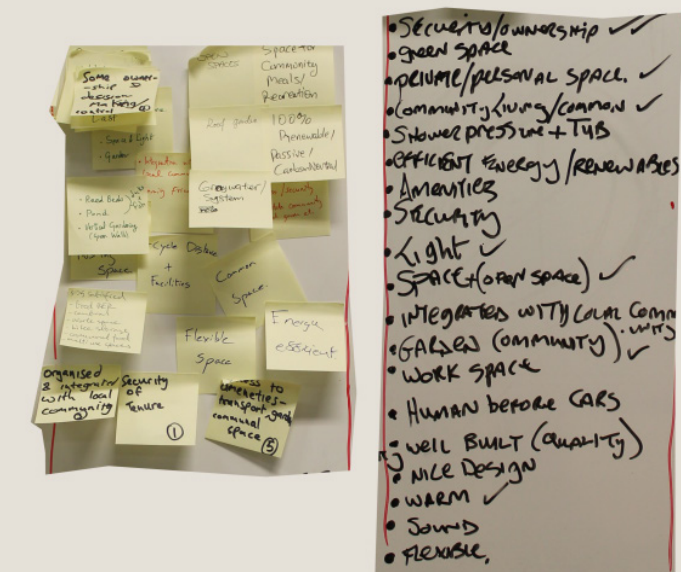
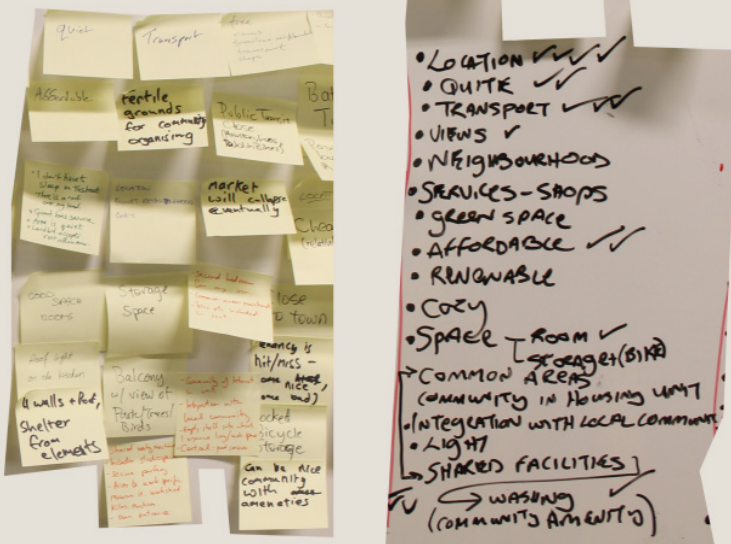


Q2:RESPONSES

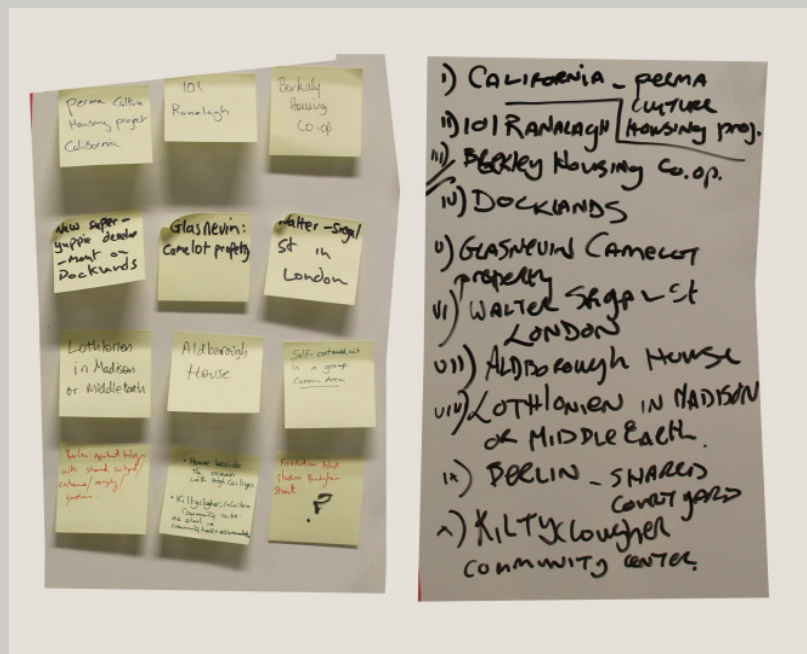
## QUESTION 3 : HIGHLIGHT ISSUES TO BE SATISFIED IN NEW HOME?



Q3:RESPONSES

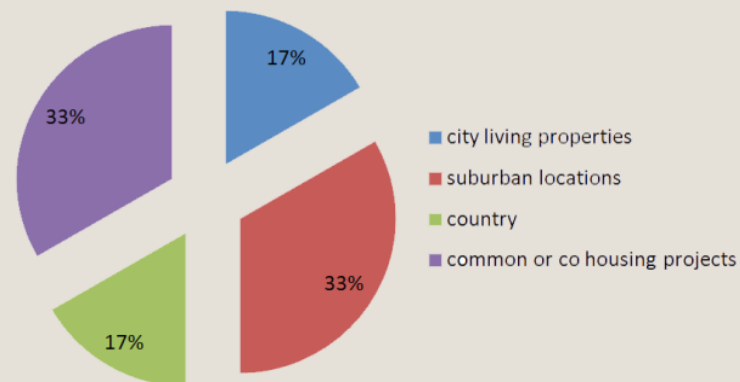




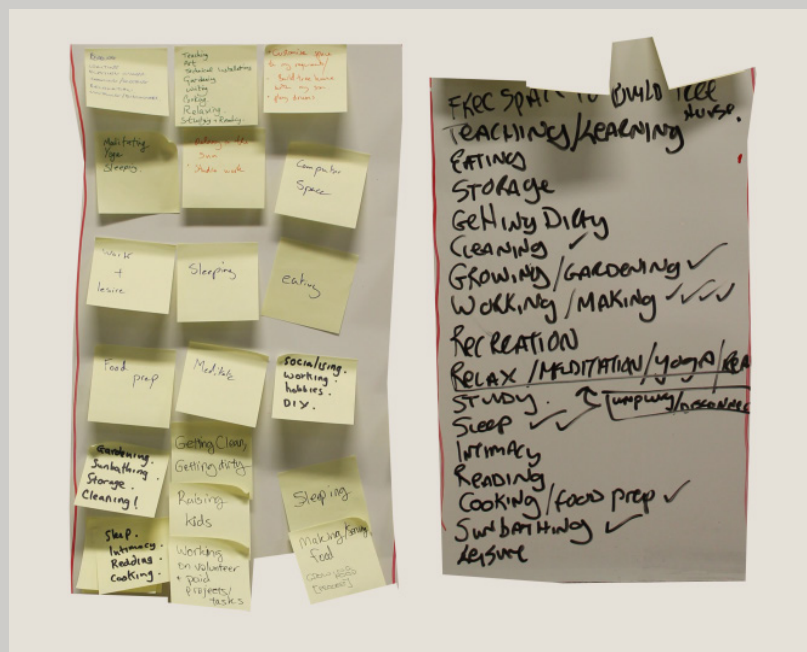


QUESTION 4 :

NAME OR DESCRIBE 1 OR 2 CITY DWELLINGS THAT YOU HAVE SEEN IN WHICH YOU WOULD LIKE TO LIVE; DUBLIN, ELSEWHERE?

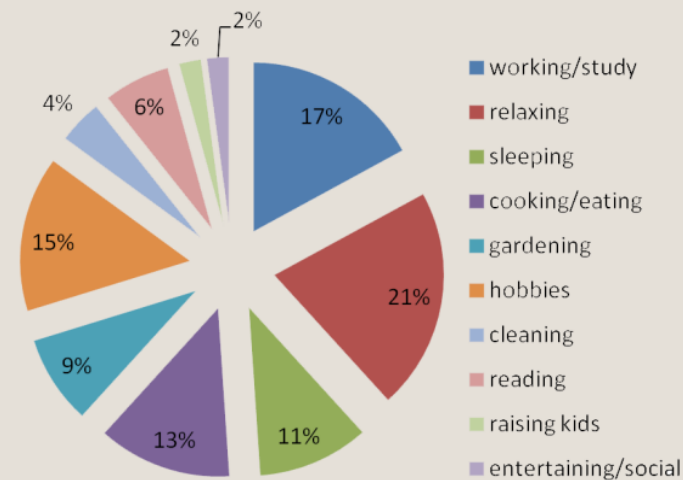


## Q4:RESPONSES

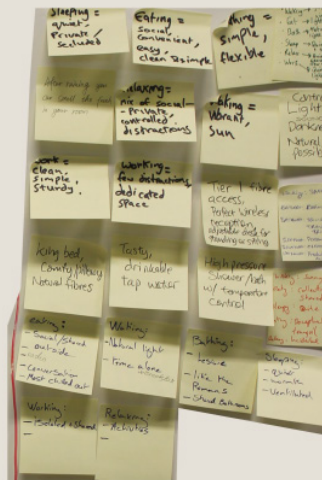


QUESTION 5 :

### WHAT ACTIVITIES DO YOU UNDERTAKE IN YOUR HOME?



## Q5:RESPONSES



**Sleep:** quiet, private, ventilated, secluded, warm, personal, spacious, king bed, comfy pillow, natural fibres

**Eat:** social, convenient, easy, clean, simple, garden view, light, space, warm, cosy, collective, sheltered, outside, radio, conversation, most chilled out!

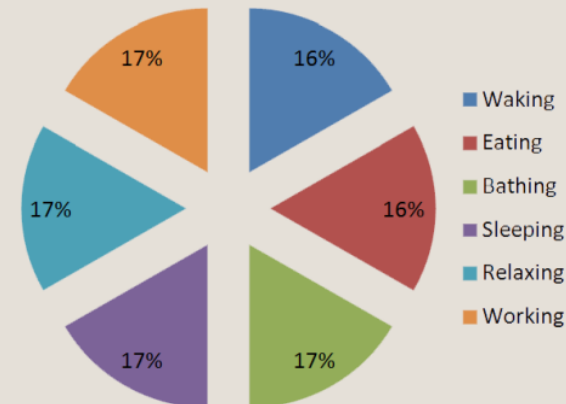
**Bath:** simple, flexible, light, hot water (lots), secluded, tranquil, leisure, like the Romans, shared bathroom

**Wake:** light, warm, space, vibrant, sun, safe, fresh, time alone, breakfast

**Work:** quiet, space, light, warm, clean, simple, sturdy, dedicated, few distractions, isolated, shared, productive, free, active

**Relaxing:** activities, quiet, warm, view of garden, creative, dynamic, interesting

## QUESTION 6 : WHAT ATMOSPHERE DO YOU WISH FOR IN THE FOLLOWING ACTIVITIES IN YOUR DWELLING?



Q6:RESPONSES



**FOR HOMELESS**

**CHALLENGES**

- ACCESS TO SERVICES
- ACCESS TO QUALITIES
- CULTURE - NEW EXPERIENCES
- EXCLUSIVE - CONNECTED
- USE OF SPACE - COMPROMISE
- POLLUTED
- NO GREEN SPACE
- VIOLENCE
- POWER IN NUMBERS
- VARIETY
- NOISE
- COMMUNITY

**ADVANTAGES**

- SERVICES ETC
- ACCESS TO QUALITIES
- CULTURE - NEW EXPERIENCES
- EXCLUSIVE - CONNECTED
- USE OF SPACE - COMPROMISE
- POLLUTED
- NO GREEN SPACE
- VIOLENCE
- POWER IN NUMBERS
- VARIETY
- NOISE
- COMMUNITY

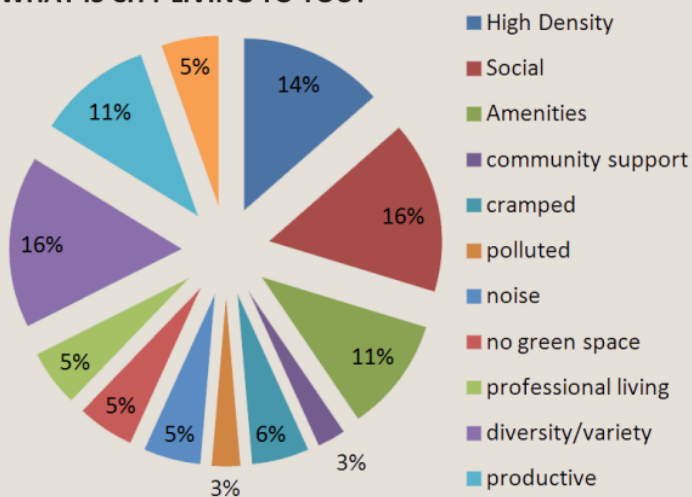
**CONSIDERATIONS**

- NOISE AWARENESS
- CLASS DIVISION
- COMPROMISE
- TOGETHERNESS
- PRODUCTIVE

**Home**

- All I know

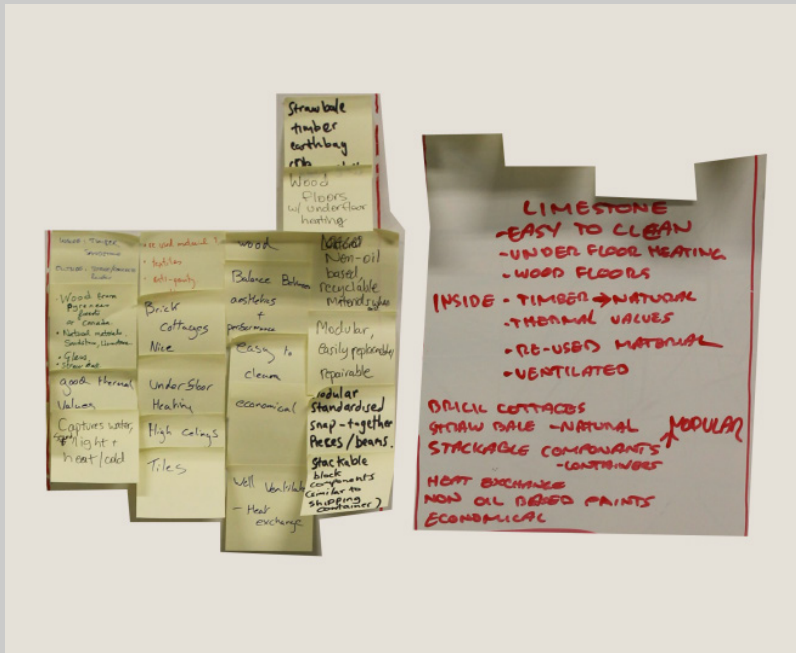
## QUESTION 7 : WHAT IS CITY LIVING TO YOU?



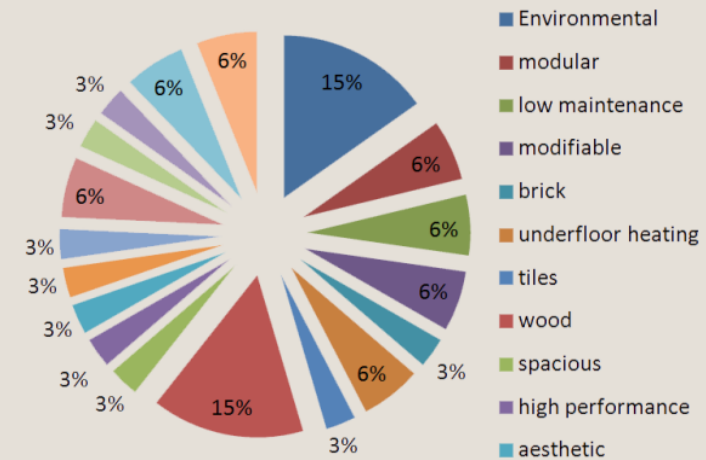
Q7:RESPONSES



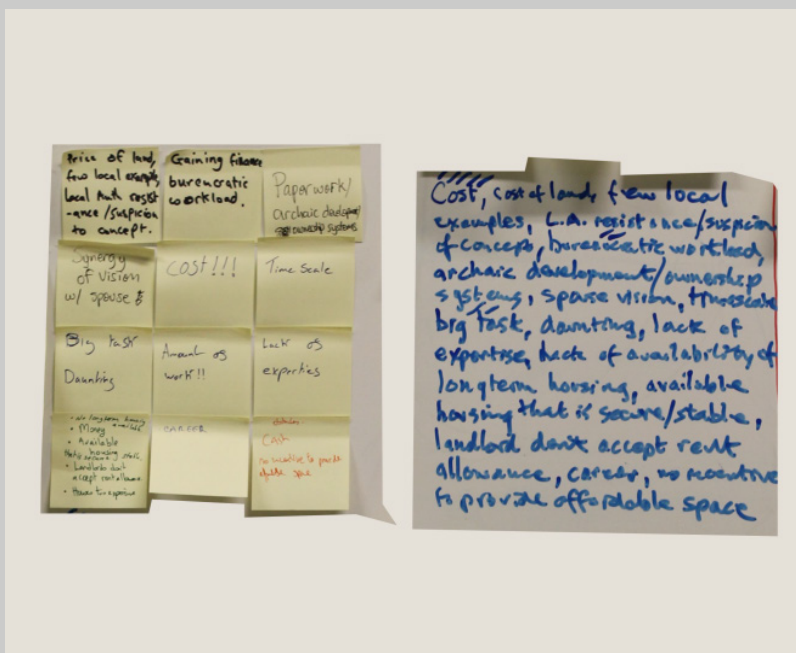




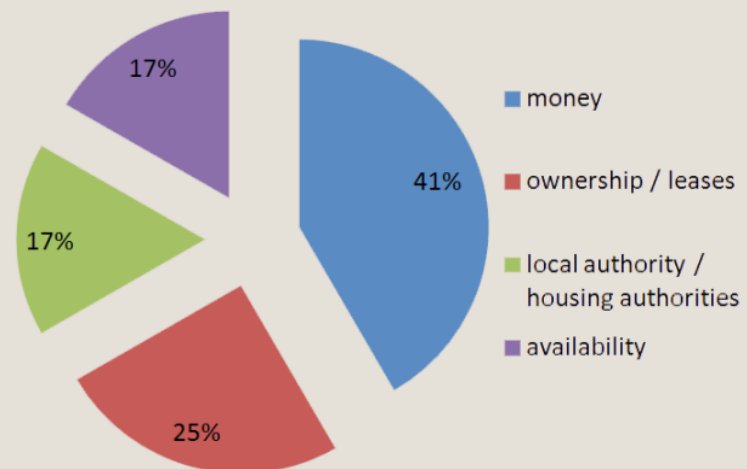
## QUESTION 9 : WHAT ARE YOUR FAVORABLE MATERIALS?



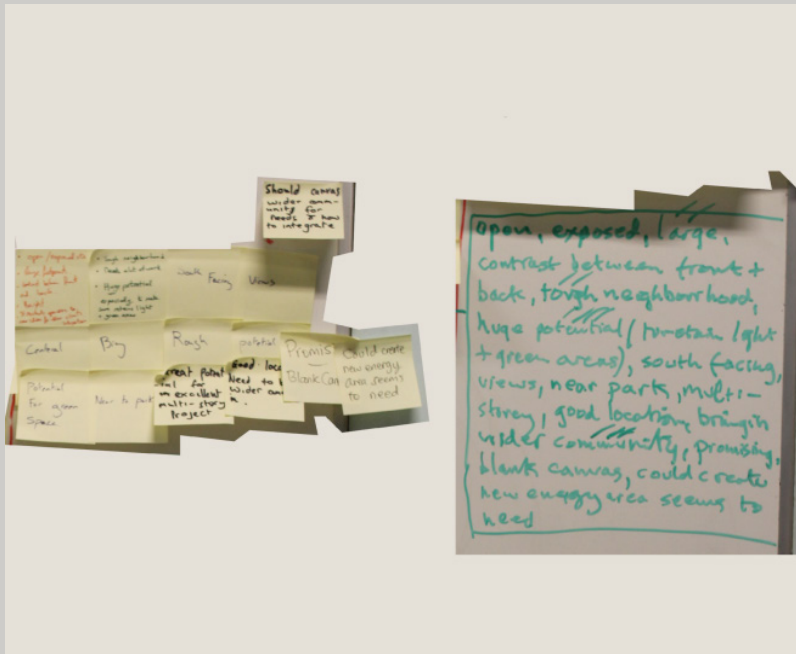
Q9:RESPONSES



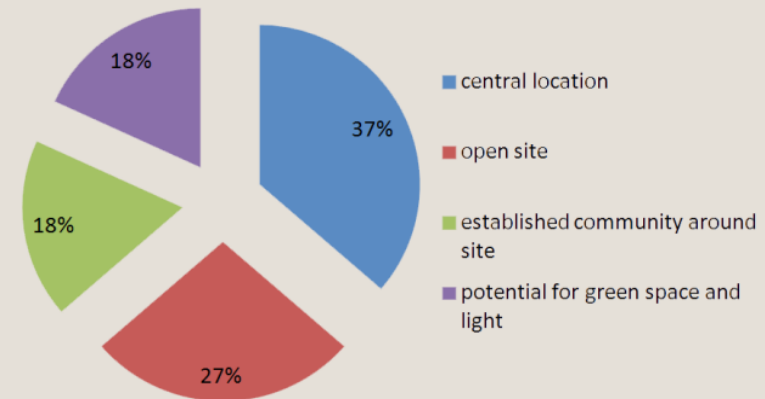
## QUESTION 10 : WHAT DO YOU SEE AS THE GREATEST OBSTACLE TO GETTING YOUR DESIRED HOME ?



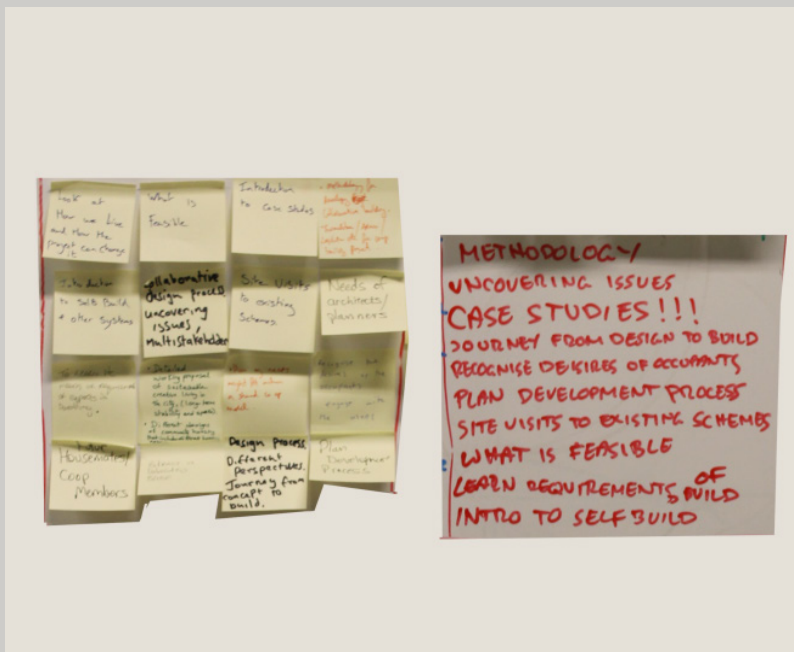
Q10:RESPONSES



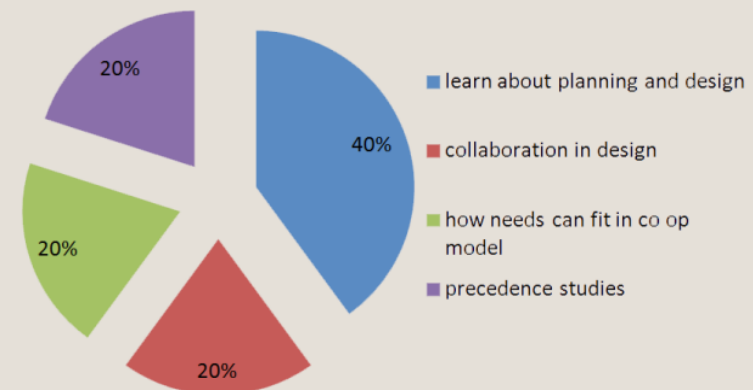
QUESTION 11 :  
DESCRIBE IN A FEW WORDS YOUR FEELING /  
OPINION ABOUT THE SITE?



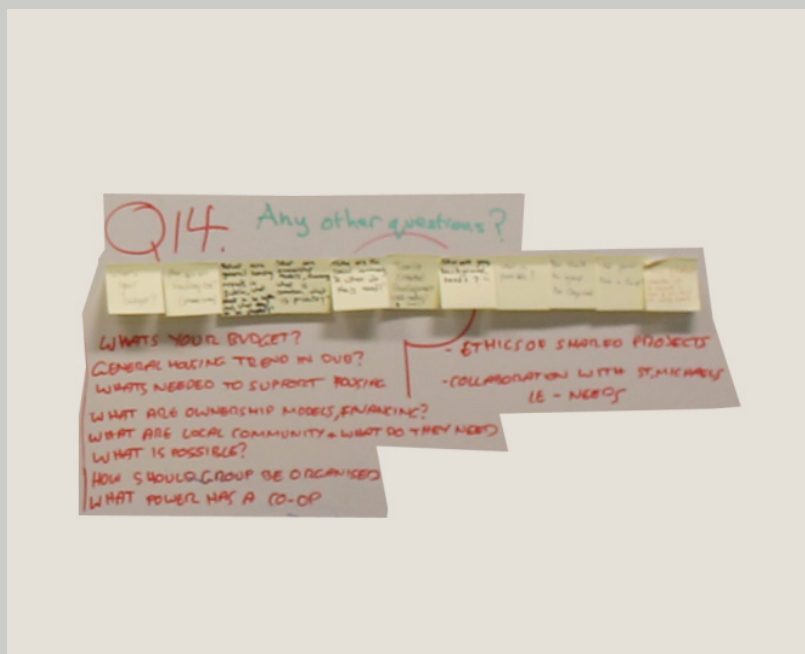
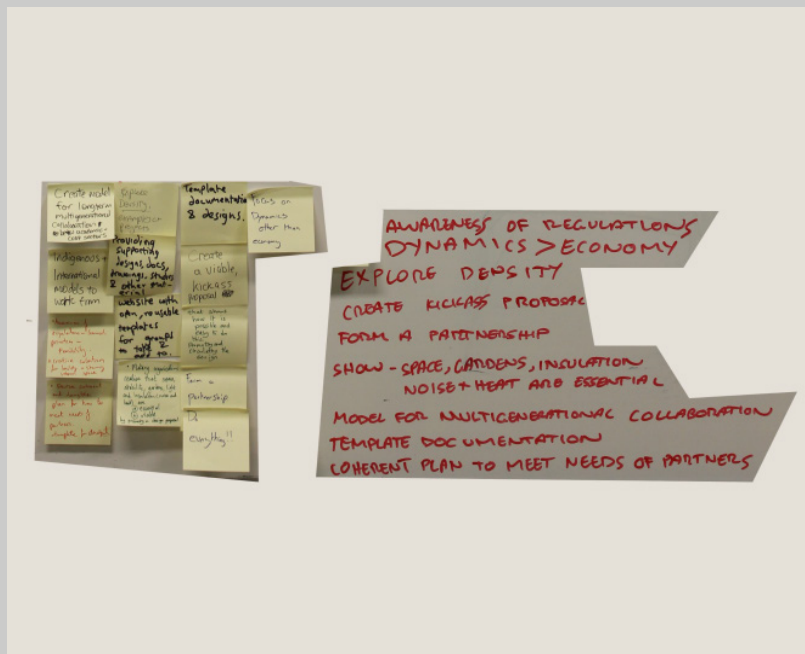
Q11:RESPONSES



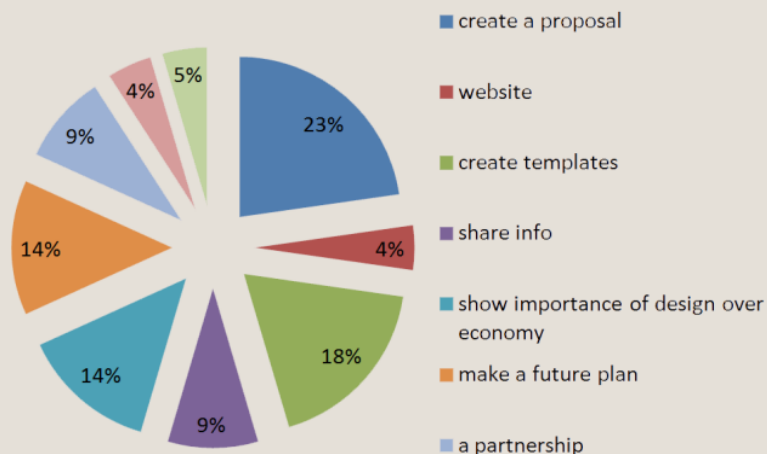
QUESTION 12 :  
WHAT DO YOU HOPE TO LEARN FROM  
THIS COLLABORATION WITH DSA / DIT?



Q12:RESPONSES

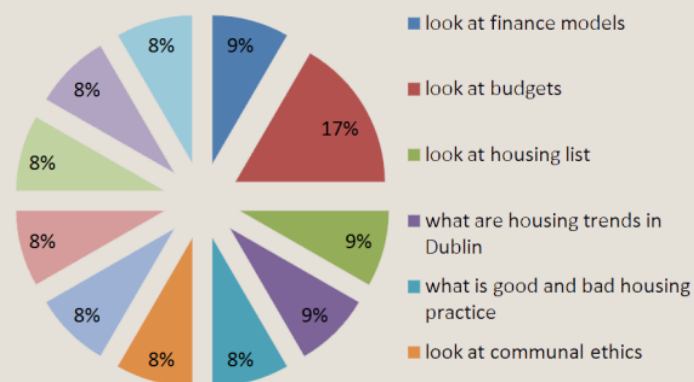


## QUESTION 13 : HOW CAN WE (DUBLIN SCHOOL OF ARCHITECTURE) HELP?



Q13:RESPONSES

## QUESTION 14 : FURTHER ITEMS TO BE ADDRESSED / AREAS TO BE EXPLORED?



Q14:RESPONSES

THANK YOU !!



FURTHER QUESTIONS ?

DUBLIN SCHOOL OF ARCHITECTURE  
Collaborative Design Workshop 2

THE DUBLIN HOUSING  
CO-OPERATIVE

*In association with*

clúid  
housing



The intention of the second collaborative workshop was firstly for the students to report back on their findings from Workshop 1 and to explain a selection of precedents of cooperative housing projects that they had studied. The latter exercise had specifically been requested by members of the Co-op.

Following this the students facilitated three short group sessions on the following themes:

1. Your favourite dwelling
2. Light and shadow
3. Model the site with your ideal housing scheme

John recorded the participatory processes by camera.

We concluded the workshop with a general reflective discussion on what had been learned from these exercises and then considered proposals for what we would do for the final workshop. Some images of the results of these participatory activities are shown in the following pages.

# Precedents Presentation

Your favourite dwelling

Mood board on the rating of spaces / dwellings from images of precedents.

Students asked the participants to choose their preferred picture/s of different dwelling/s & communal spaces and create their own mood board for their ideal dwelling.

Students: Holly, Shay

## Danish Workers Building Society Copenhagen 1865

The buildings were built in central Copenhagen by the docks.

The union was mostly formed from the workers of Burnmeiter and Wain.

The houses were all standard terrace houses made of yellow brick and slate.

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## Danish Workers Building Society Copenhagen 1865

Each person had to pay to get a building, then had the option of paying double to buy it outright or wait 25 years to pay rent and then get the deeds.

Men women and children were each allowed to buy up to 10 shares in the co-op.

## Honer Oak, London 1947

This is a Walter Segal approach.

The Buildings were all built by their owners.

This way of building creates a huge sense of pride in place.





## Honer Oak, London 1947

This is actually a cheap way of building as all labour costs are reduced.

The design is created in such a way as to ensure all the materials can be sourced locally from Hardware stores.

The biggest cost in this scheme is the cost of the land.



## Honer Oak, London 1947

Like the first one, this is an individual house strategy.

However due to the fact that your neighbour was building next to you this would have created instances of social debt.

The individual houses created a streetscape.



## Tinggarden Denmark 1978

There are 79 units and every 12/17 units is a 'family' each family has its own small common area.

There is one big communal area.

Each house is able to expand into its neighbours



## Tinggarden Denmark 1978

This co housing scheme has done so well that not only did they expand and open a second Tinggarden, most of the original owners now live there with the second generation.

There is also a huge mix in the ages of the people within the scheme, this actually make the scheme more secure as the elderly members hang around the area.



## Tinggarden Denmark 1978

In 1975 The Danish ministry of housing held a new housing typology competition.

This was a reaction against modernism ideals and hoped to promote low rise high density

Each resident has to contribute labour, most people in this project are middle income earners, teachers or social workers and so have no issues with paying the 'rent'.



## Abeona London 1975/1983

This Project has 42 flats.

The people in the project were originally squatters, and so the plot was bought in 1975. However it was redesigned in 1983-88.

The dwellings stretch from front to back and crossways at the back.

There is one shared common garden at the back.



## Abeona London 1975/1983

It works as a secure apartment block, but it looks like a normal housing terraced block from the front.

As all the people were originally squatters they had huge experience with living together.

They were also hugely influential during the design process.



## Abeona London 1975/1983

The project was funded by the Camden County Council, as part of a scheme to stop squatting.

The project was given money to create a group for Gay men and women, feminist groups, young people and people with AIDs.

This co-op is registered as a social landlord and has resided grants, as well as having private properties.





## Vrijbucht Amsterdam 2003

There are 56 units, 49 of which are purchasable instead of rentable.

There is a creche, a theater, a café, a conference spaces 12 workshop/offices, guest rooms a communal garden and a communal rooftop terrace.

All of these facilities were originally designed to be managed by the people who lived in the building.



## Vrijbucht Amsterdam 2003

The building is a large apartment complex, and is designed around the communal courtyard.

The site is accessible over a pedestrian bridge, and the carpark is the other side of the bridge, and has a set number of users.

There is a really good mix of people in the building as a number of the rooms were given as social housing but the area it is in is an upper market area.



## Vrijbucht Amsterdam 2003

The Netherlands housing association ran a competition for this site.

De Key housing Funded this project, all the apartments were bought off plans to help the financing.

The main architect for this project Hein De Hann was a serious anarchist and hoped this would develop into a repeatable typology that could help communities.

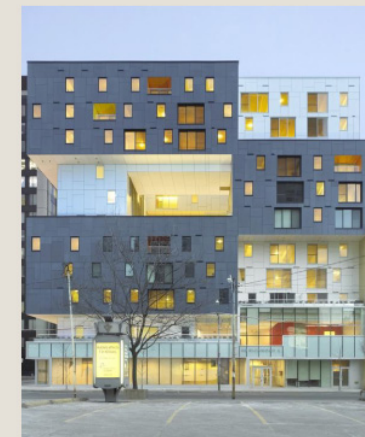


## 60 Richmond Toronto, Canada 2010

This apartment co-op has 85, studio or 1 or 2 bed apartments.

There are shared balconies, a training kitchen and a restaurant.

The restaurant's training kitchen are stocked by the sixth floor terraces.





## 60 Richmond Toronto, Canada 2010

The building isn't really communal however it does have communal space, such as the terraces.

The building works as apartments.

There is a secure carpark under the building and a public car park at the front of the building.

The ground floor holds the restaurant and the training kitchens and aside from the terraces is the communal area



## 60 Richmond Toronto, Canada 2010

Toronto Community Housing Corp. and Toronto City Council and Ottawa+Queenspark Project Developers funded the project.

The tenants are all from the hospitality sector.

The building itself is a LEED gold green standard.



## R 50 Berlin, 2013

This building has 19 bespoke apartments

Each apartment was designed for the person who bought it.

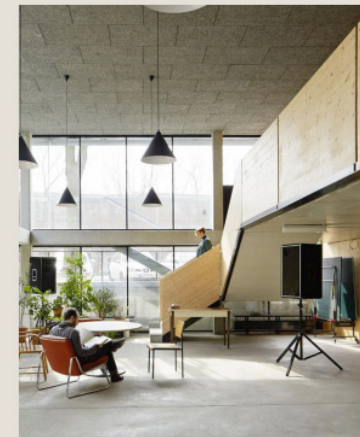
The residents are all, artists or architects.



## R 50 Berlin, 2013

The balconies are the only communal areas within the building other than circulation space.

This is a private apartment block with a private car park.



## R 50 Berlin, 2013

The Residents had huge input into the design process.

The Berlin Senate Department for Urban Development, as well as the Umwelt Bank funded this project.

Each of the people living in the development bought the apartments from plans.



External of Vrijbrucht

**Most people chose this picture**

Reason:

Shared outdoor space with water access

A very open welcoming space

Multifunctional building, ie offices and retails



External of Vrijbrucht



Internal of Honor Oak Segal



Internal of Vrijbrucht

**These are other popular pictures**

Reason:

Communal meals

Nice outdoor space with balcony areas

Reason:

Good light, views and open air space

Building links to outdoor spaces

Natural materials

Reason:

Bright

Shared activity/communal space



External of Honor Oak Segal



External of Honor Oak Segal



Internal of R-50

**These are other popular pictures**

Reason:

Decks, simple, light

Good mixed materials

Nice outdoor space

Reason:

Balconies, nature zone

Lots garden spaces for different activities

Reason:

Nice open space

Glass and library feel

Ability to personify

# 3D computer shadow model analysis and feedback

Light and shadow

Using a Digital Sketch Up model of the site students asked the participants to request the placement of building blocks in their preferred location on the site and then all in the group reviewed the impact in terms of daylight, overshadowing, views etc.

Students: Andy, Kieran, Sean



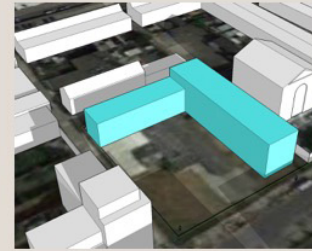


#### Pros

- Continuation of streetscape creates dialogue with existing
- Stepped nature of scheme fits in with housing and front and back
- Creation of internal green space

#### Cons

- Bad over shadowing qualities
- Low densities
- Very cut off from its context

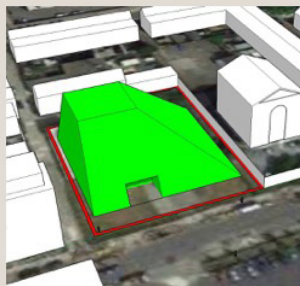
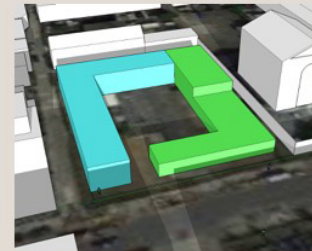


#### Pros

- Continuation of streetscape creates dialogue with existing
- Stepped nature of scheme fits in with housing and front and back
- Creation of internal green space

#### Cons

- Bad overshadowing qualities
- Very low densities
- Cut off from the street to the rear
- Very open to the street (top)

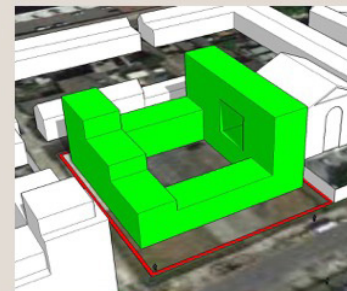


#### Pros

- High density.
- Landmark design.

#### Cons

- Overshadowing
- Single aspect
- Not enough external space



#### Pros

- High density.
- Dual aspect.
- Well lit.
- Public street space.
- Variety of private spaces.

#### Cons

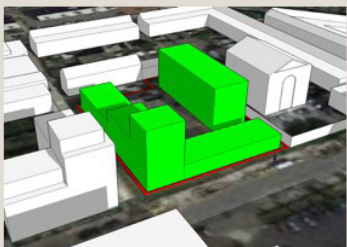
- Not sympathetic to neighbors.
- Poor external spaces

## Pros

- Continuation of the building line maintains the existing streetscape
- Stepped nature of scheme fits in with existing housing to front and back
- Creation of internal green space – not too over shadowed
- Good density
- Secure – Boundary's are defined to the front
- Opens up at the back to create a new open space with existing street.
- No major over shadowing in the central space

## Cons

- Could it be Denser?



# Physical modelling analysis and feedback

Model the site with your ideal housing scheme

Having explained the different types and sizes of apartments that were block modelled students invited the participants to arrange them, along with communal facilities, the St, Michael's House Day Care facility, vertical circulation cores etc., on the site model and to effectively model their ideal housing scheme for this site.

Students: Shane, Emma, Ben





## Pros

Smaller communal courtyard spaces creating areas of variety

Creating an open street to the rear houses

New street creating connecting front and back of site

## Cons

Density appears low

Not creating a definitive street edge



## Pros

Perimeter Block - creating optimal security and passive surveillance

Central Courtyard Space Created

Communal Stairwells implemented

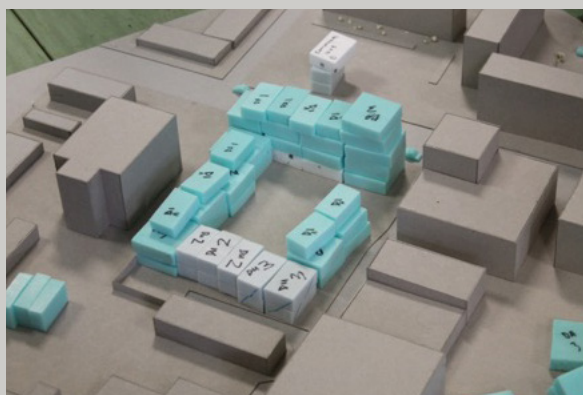
## Cons

Density is low

Buildings to rear of the site overshadowed

Daylight to the central courtyard compromised

Location of communal building unclear



## Pros

Perimeter block – creating security

Density appears High

Street edge heights in line with existing context

Courtyard Space located in central position

## Cons

Daylight to the courtyard space compromised by height of front buildings

Houses to the rear of site are overshadowed



**DUBLIN SCHOOL OF ARCHITECTURE**  
**Collaborative Design Workshop 3**

**THE DUBLIN HOUSING**  
**CO-OPERATIVE**

*In association with*

**clúid**  
**housing**

The intention of the third and last collaborative workshop was firstly for the students to present an analysis of the results from Workshop 2 as had been requested by the cooperative group members at the last workshop. This was done in a semi SWOT analysis format, using 'PROS' and 'CONS'.

Then the students explained some planning issues – those of plot ratio, density and car and bicycle parking requirements. The students had calculated the density range for the site and had compiled the apartment block models in to two groups – low density and high density. The workshop participants were then invited to build their ideal housing project on the site within the identified density range.

Following this an interactive brief formation exercise was undertaken where participants were asked to respond to headings and themes presented to them in slides in an attempt to formulate a brief for this group on this site. The proposals were recorded in post-its.

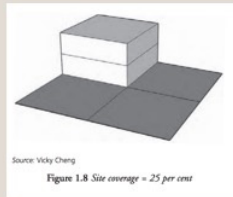
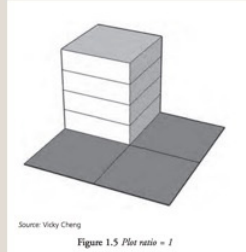
We concluded the workshop with a general reflective discussion on what had been learned from the entire workshop series and agreed what DSA would forward to the participants. Some images of the results of these participatory activities for this last workshop are shown in the following pages.



## Plot Ratio – Definition

Plot ratio is the ratio total gross floor area of a development to its site area. The gross floor area usually takes into account the entire area within the perimeter of the exterior walls of the building, which includes the thickness of internal and external walls, stairs, service ducts, lift shafts, all circulation spaces.

In building design, plot ratio is widely used in design briefing and development budgeting as it reflects the amount of floor area to be built and can be used as an estimate quantity hence.



## Site Coverage - Definition

Site coverage represents the ratio of the building footprint area to its site area. Therefore, site coverage is a measure of the proportion of the site area covered by the building. Similar to plot ratio, site coverage of individual developments is often controlled by urban master planning in order to prevent over building.

Ref: Understanding Density and High Density – Vicky Cheng

## Density – Definition

Concentration (amount) of buildings in a given geographic area. A measure of the amount of floor space available for occupation in a development expressed in the area of land on which it is built. The number of habitations per hectare, number of square meters per hectare, plot ratio are other terms.



## Selected Site

- Site Area – 2,411m sq
- Plot Ratio – Z1 0.5 – 2.0
- Site coverage – Z1 45% - 60%
- Site in Hectares – 0.2411
- Car parking Standards - Z1 1 unit per dwelling
- Bicycle stand – 1 unit per dwelling

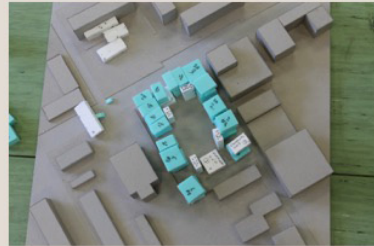
## Site Density

- Density measured in units per hectare (uph)
- Recommended Dublin inner city 120 – 135 uph

### Charles Street Site

- 0.5 plot ratio - 13 units - 54uph
- 2 plot ratio - 52 units - 215uph



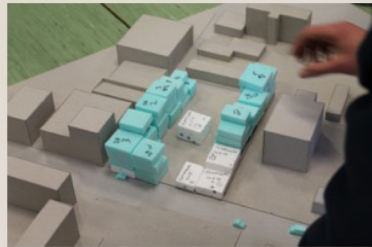


## Density task Results

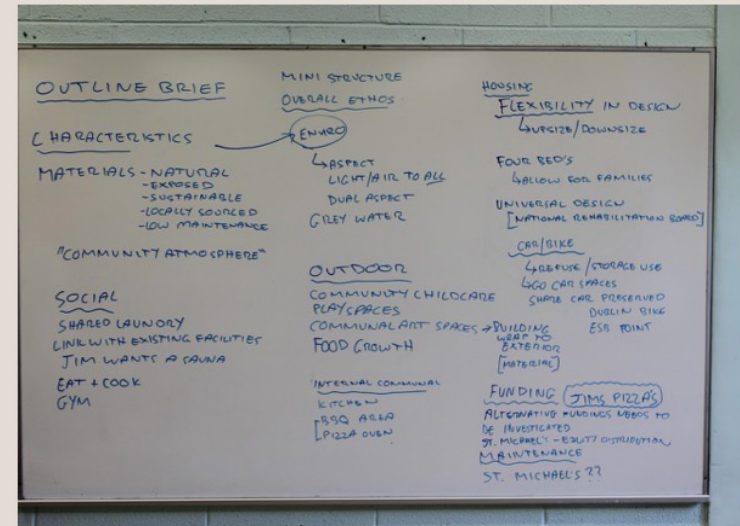
Plot Ratio – 2

52 units

215uph



## Outline Brief





# Outline Brief - as agreed with workshop participants

## Introduction

An innovative co-operative housing scheme on Great Charles Street North. The proposed scheme will house members of the Dublin Housing Co-Operative and provide a day care facility for St. Michael's House in an integrated mixed use housing scheme to be developed by Clúid Housing Association.

### The users

- Dublin Housing Co-Operative Group
- Clúid Housing Association
- St. Michael's House
- Possibly other community groups

## The characteristics of the scheme

Following on from our analysis, it has been concluded that the proposed scheme:

- Be integrated with the surrounding community
- Create a new streetscape to the site, while allowing permeability
- Create an enclosed communal space or spaces as a way of creating a secure area with passive surveillance
- Have a variety of blocks throughout the site, each with a different use such as a communal space, service space, office space, places for children etc,
- Given the varying building heights surrounding the site, potentially use a scheme with stepped heights from the front to the rear.
- High to the north of the site and lower to the south in consideration of the 2-storey cottages, whilst keeping to a reasonable height

- St. Michaels to be located to the front of the site with front access as well as access to a drop off zone
- Create a community atmosphere within the scheme
- The creation of a “living street” atmosphere with a variety of garden and court yard spaces throughout
- Semi-private and private terraces and balconies to be located throughout the scheme
- The materials used within the scheme should be environmentally friendly, natural and locally sourced when applicable and be of low maintenance

## The social and use mix

- Scheme to contain fully integrated communal garden spaces
- There should be areas to meet and to partake in many different activities
- The green areas should have a sense of “wildness”
- The scheme should have areas to work together and privately
- There should be areas to eat together consisting of communal dining and kitchen areas
- The scheme should include a communal laundry room and gymnasium
- Semi private and private terrace spaces and balconies
- Non-linear and a varied exterior
- The social spaces to be secure with passive surveillance



## Environmental aspects

- Use of renewables for group heating/energy scheme
- Provided for composting and recycling
- Rainwater harvesting
- Warm homes that are highly insulated/passive
- Green Roofs
- The achievement of Passive House and nZEB standards to be reviewed
- Use of grey water retention to be utilised on site

## Outdoor Communal amenity

- Community allotments
- A space for children
- Areas with water, ponds
- Garden spaces
- Roof gardens (if/where possible)
- Good light, and good views
- Community childcare facilities integrated with secure play spaces
- Communal art spaces (also to be shared internally)
- Vegetation and food growth plots to be established
- Outdoor communal BBQ area

## Access and circulation

- Options for vertical core and/or gallery access to be reviewed

## Internal communal space and facilities

- Community room for meetings and social gatherings – easily accessible to all
- Communal dining
- Communal activity spaces

## The dwellings

- Bright with big windows
- Shared balcony access acceptable in addition to private outdoor space
- Ability to personalise
- Open plan
- Wood or other natural materials
- Dual aspect preferred
- Flexibility in design and layout manipulation

A mix of .....

- Studio
- One bed
- Two bed
- Three bed
- Two bed duplexes
- Three bed duplexes
- Four bed duplexes

.....to suit changing demography

## Car and bicycle parking

- Extent of resident car parking to be reviewed; consider provision of Go-car spaces with ESB charge point
- Car parking to be provided for St. Michael's House staff
- Secure bicycle parking for residents; minimum one per resident
- Refuse and storage area

## Funding

Alternative funding needs to be investigated  
 Possibility of some funding from St. Michaels to be investigated

## Management and maintenance

- Clúid Housing Association
- Dublin Housing Co-operative
- St Michael's House