

# Towards 21st century independent living

## Moderator

**Jemma Mouland**, senior innovation and change manager, Centre for Ageing Better

## Speakers

**Kerri Robinson**, chief operating officer, Alcove

**Carly Dickson**, design researcher, RAWE / MIT AgeLab

**George MacGinnis**, Healthy Ageing Challenge director, UK Research and Innovation

**Gwyn Roberts**, head of housing and policy, BRE



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George MacGinnis  
Healthy Ageing Challenge Director  
UK Research & Innovation  
Homes UK, London, 28<sup>th</sup> November 2019



# How do you think about ageing?



# Ageing Society

- Across the EU, there were 199 million people aged 50+ who consumed €3.7 trillion of goods and services in 2015.
- Homeowners over 50 hold £3 of ever £4 in housing value, which amounts to £2.1 Trillion, of which just 7% is still borrowed
- If ranked among sovereign nations, the Silver Economy would be the third largest economy in the world, behind only the USA and China

*People will enjoy **five more years of healthy, independent life** by 2035, whilst narrowing the gap between the experience of the richest and poorest (measured through improvements in disability-free life expectancy)*



# The Healthy Ageing Vision

To enable businesses, including social enterprises, to develop and deliver products, services and business models that will be adopted at scale which support people as they age. This will allow people to remain active, productive, independent and socially connected across generations for as long as possible.





© Image courtesy of NB: Studio Ltd

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# RADICALLY ACCESSIBLE WILDLY ENGAGING PLACES TO LIVE



Carly Dickson

RAWE Project / MIT AgeLab



**DESIGN FOR  
OUR  
FUTURE SELVES**









# **TOWARDS 21ST CENTURY INDEPENDENT LIVING**

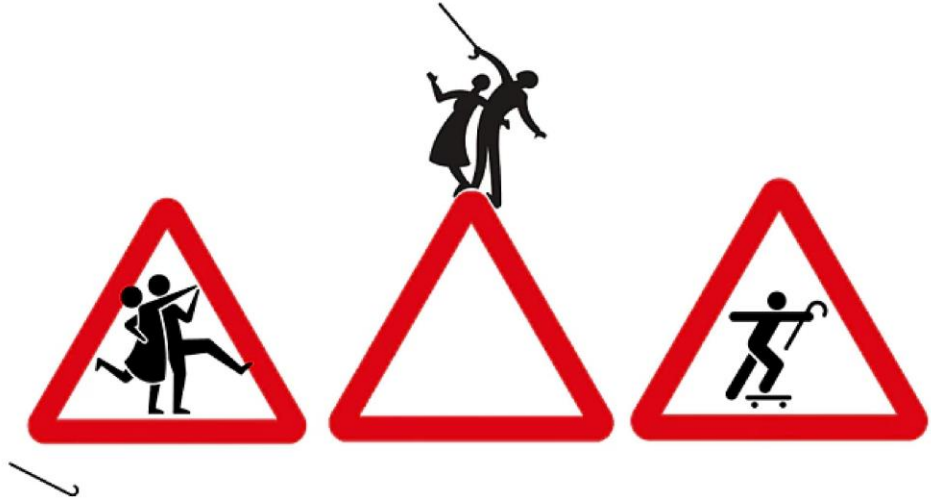
**TOWARDS** *your future*



**we should have higher expectations for our environment**

**we should have higher expectations for ourselves**





Sign of the Times campaign / UK

**INCLUSIVE DESIGN**

**×**

**HOUSING + CARE**





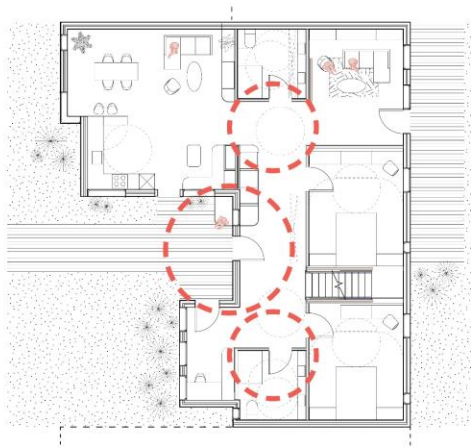
**WHAT NEW IDEAS AND TECHNOLOGIES ARE  
HELPING PEOPLE TO LIVE BETTER AND LONGER IN  
THEIR HOME?**



**how is our current environment stopping people from  
living better and longer?**



**20% of homes failed the  
Decent Homes Standard**



**only 7% of homes have the four  
basic accessibility features**



**1/3 of people in their late 80s have difficulty undertaking 5 or more basic daily activities**



**falls in the home cost the NHS £435 million**

**tech may be able to detect a fall**

**first, let's design our spaces to prevent falls**

**how can we design our new and existing homes to  
enable and empower us?**



**5% of people over 65  
live in specialist housing**

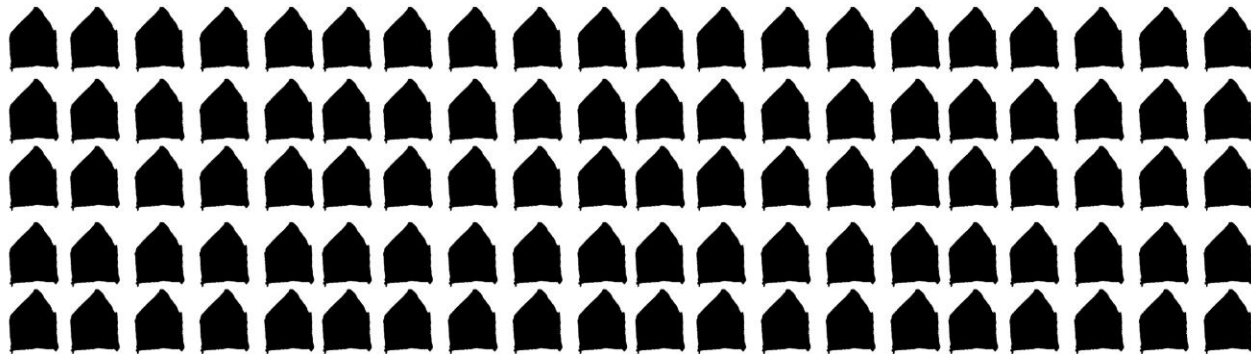


C2



5% of people over 65  
live in specialist housing

C3



95% of people over 65  
live in mainstream housing



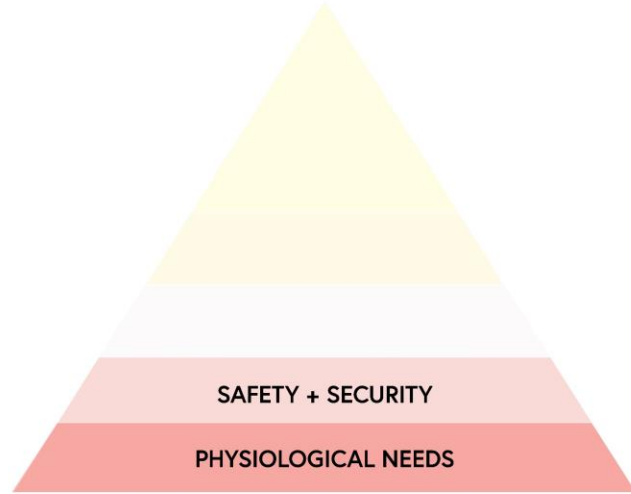
we need physical access



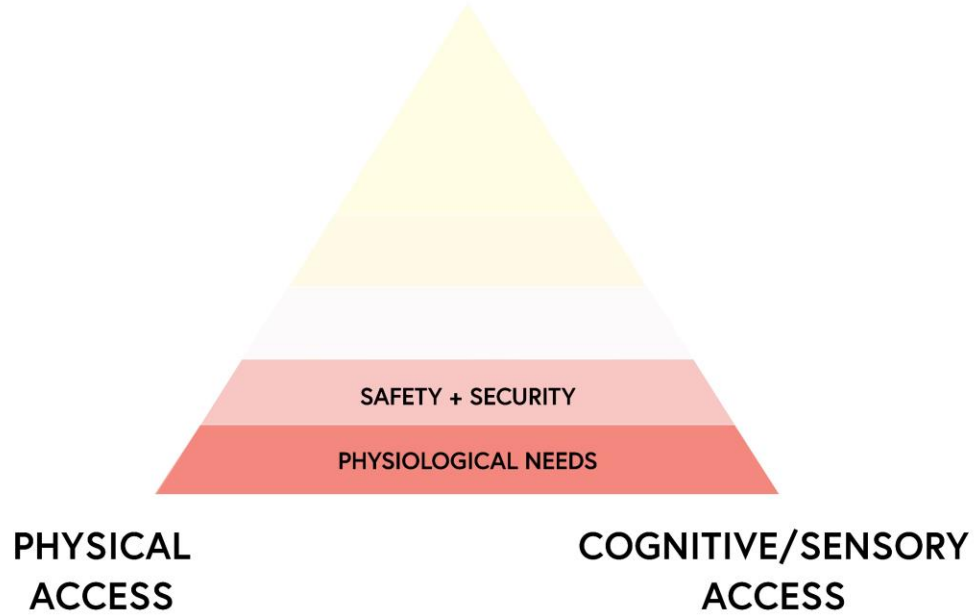
what about cognitive + sensory access?

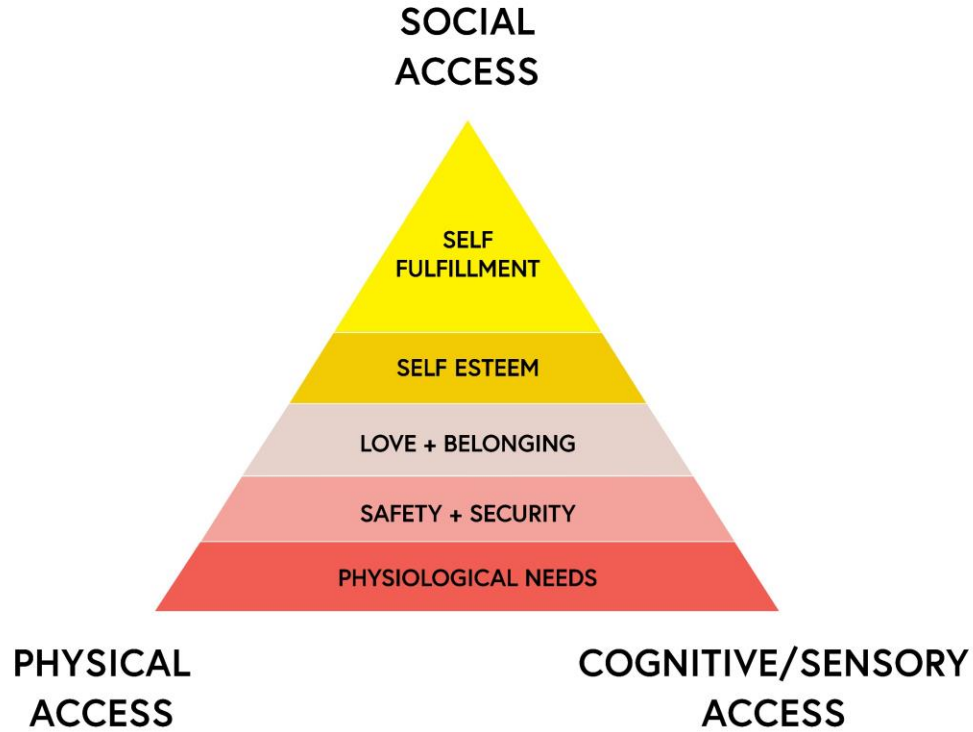


what about social access?



**PHYSICAL  
ACCESS**

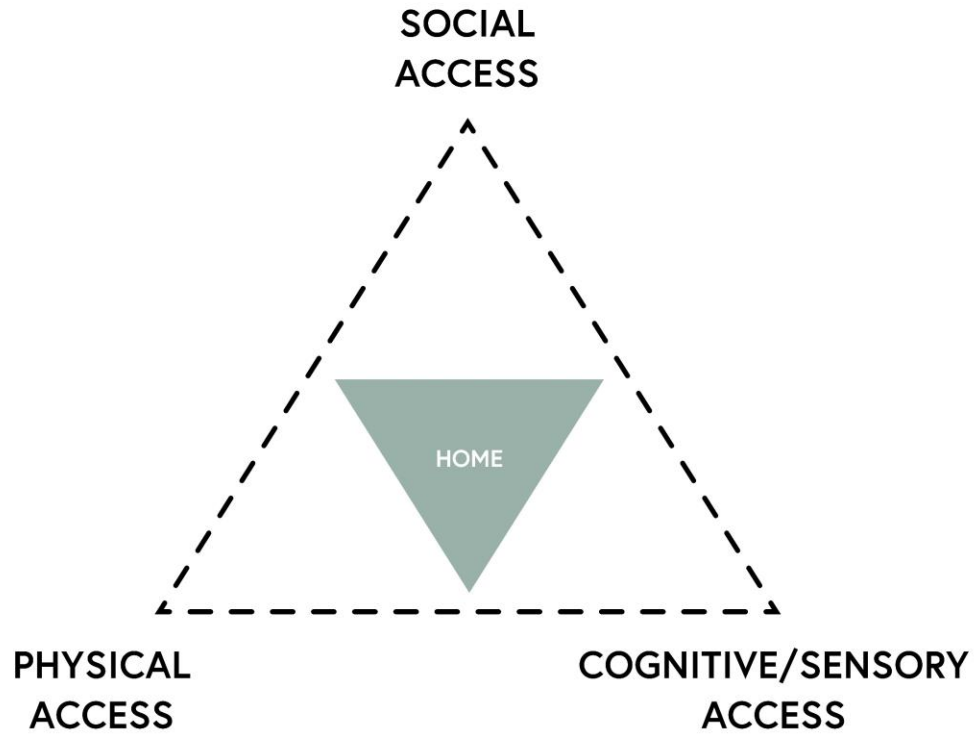


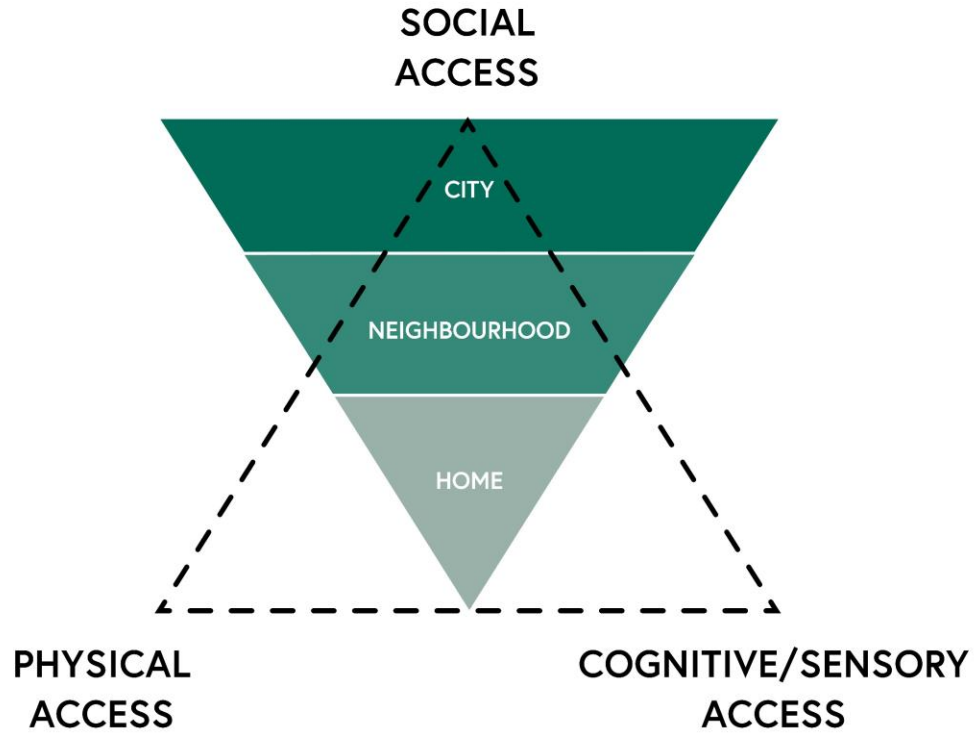




**84% of people 70+ feel they  
strongly belong to their neighbourhood**

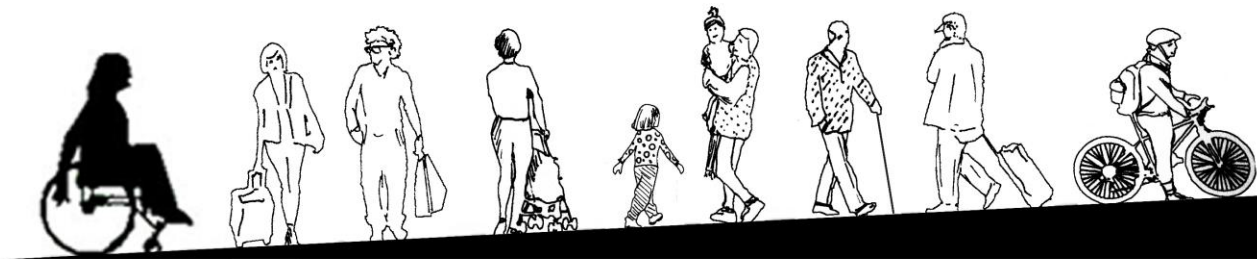








1:20 - 30cm over 6m



1:20 - 30cm over 6m

**83% of the public are concerned about quality of life in older age**

**83% of the public are concerned about quality of life in older age**

**but**

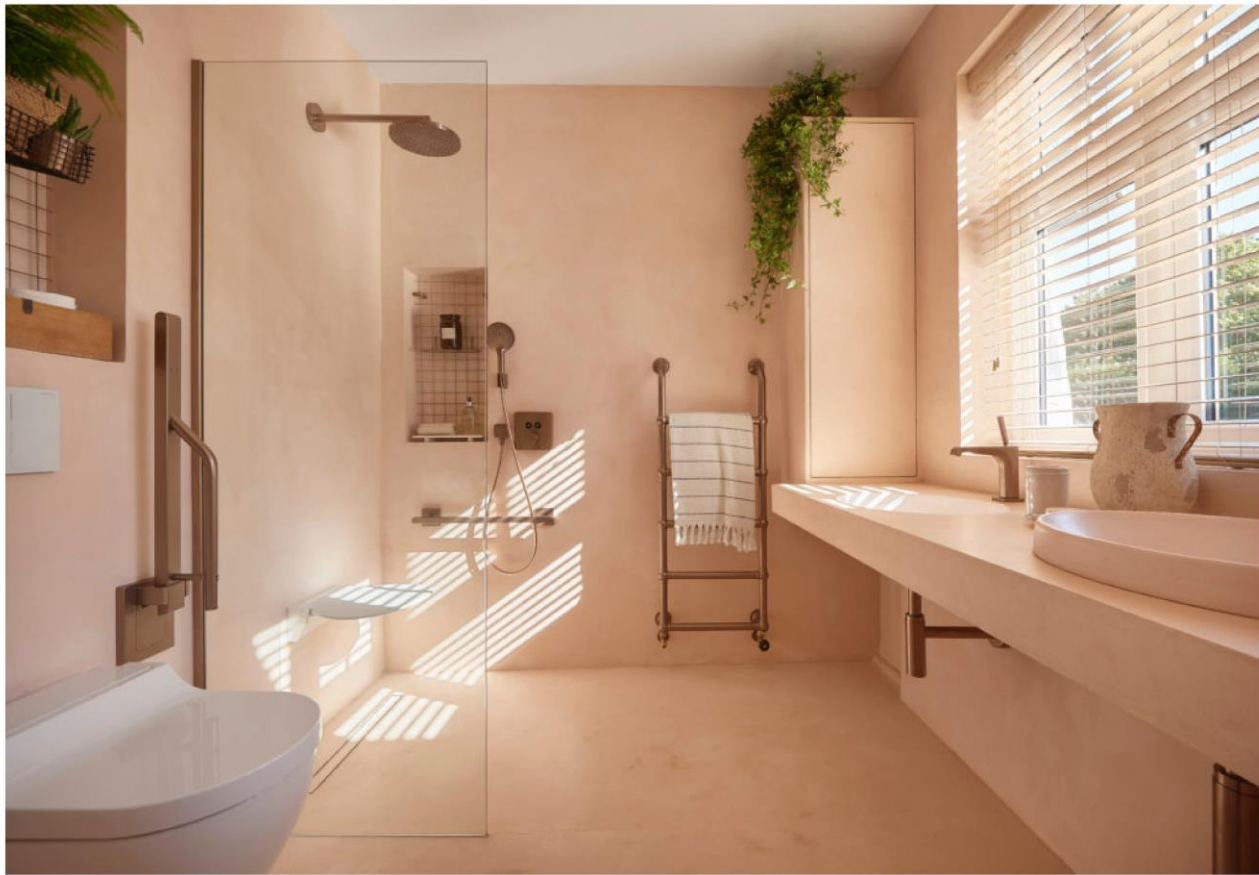
**85% of the general population admit to not planning for later life**

**DIVERSE DESIRABLE CHOICES**

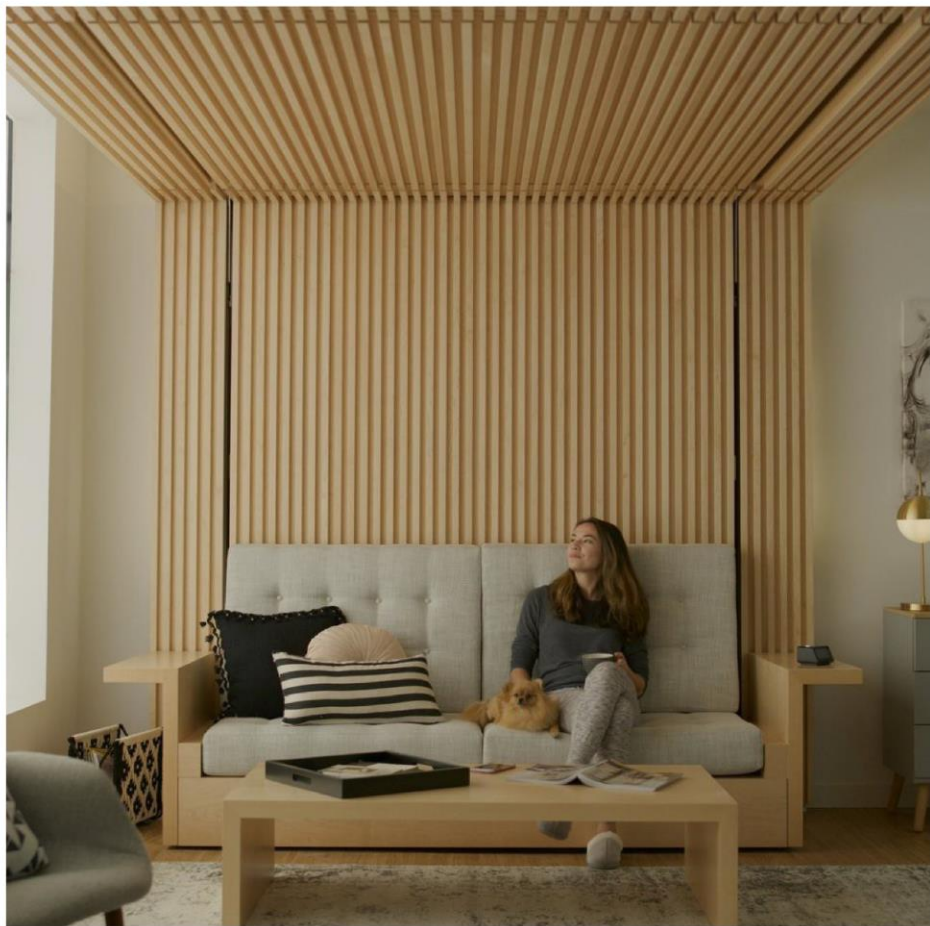


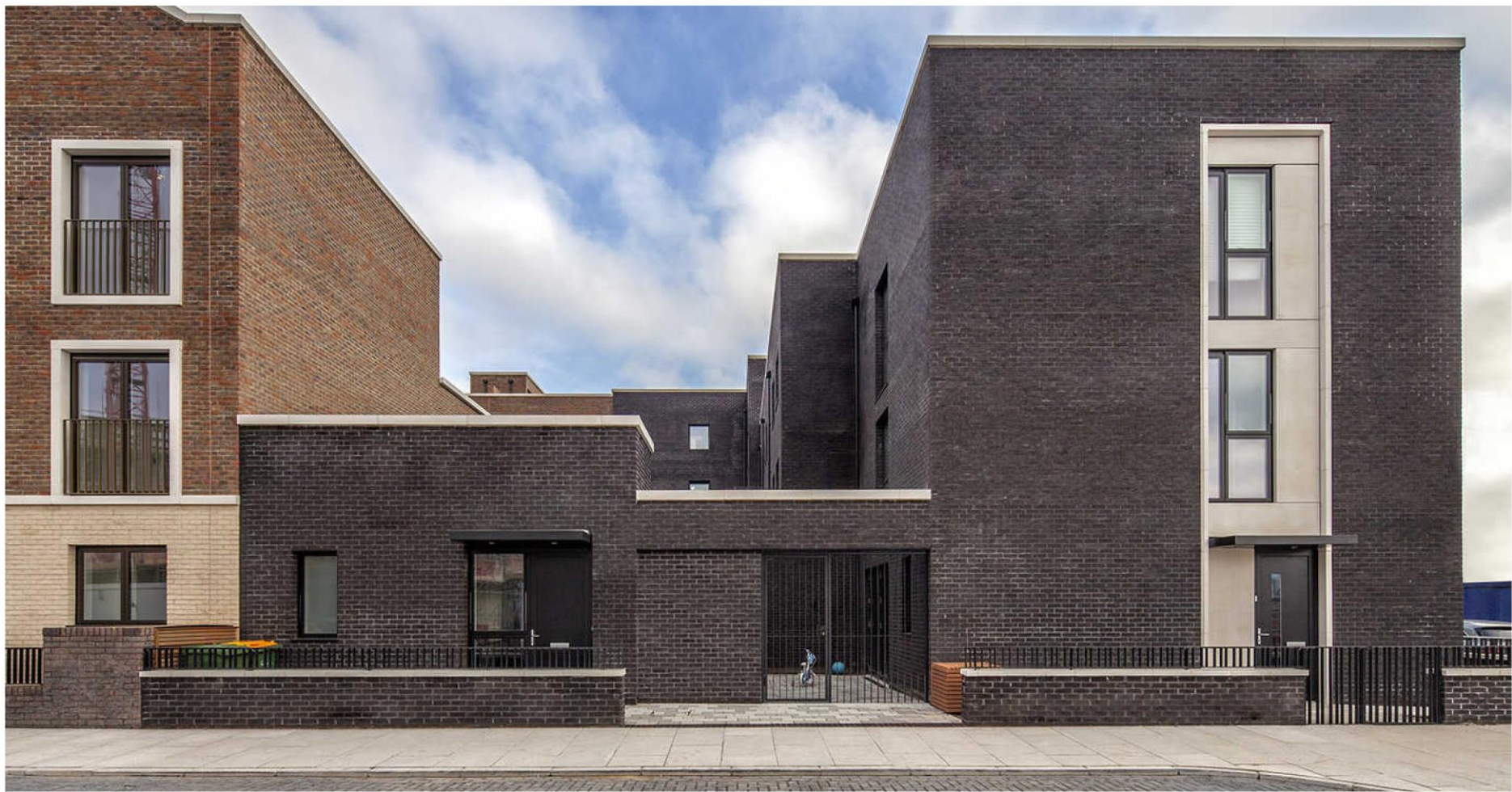
Dilys / Dorothy



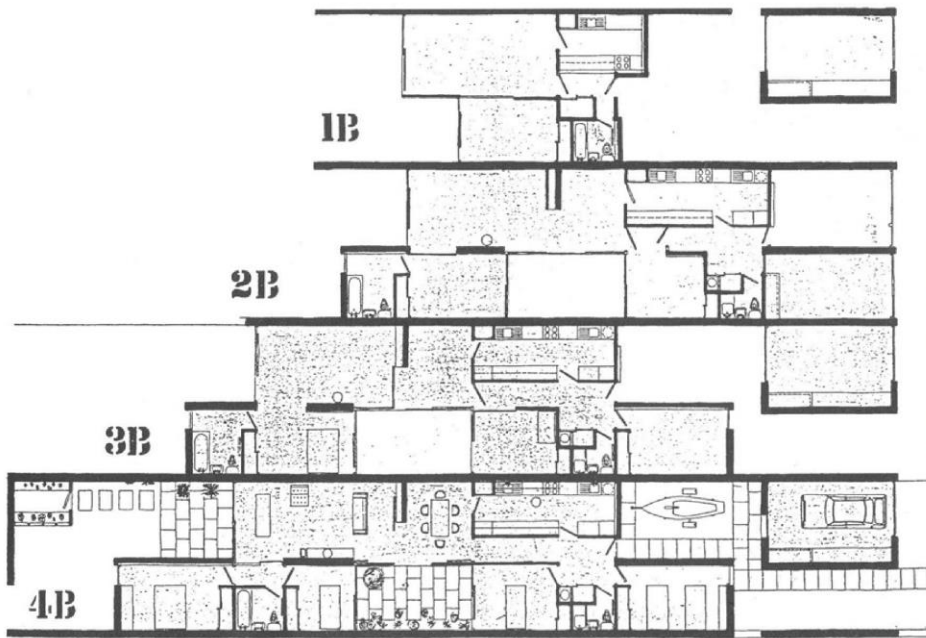


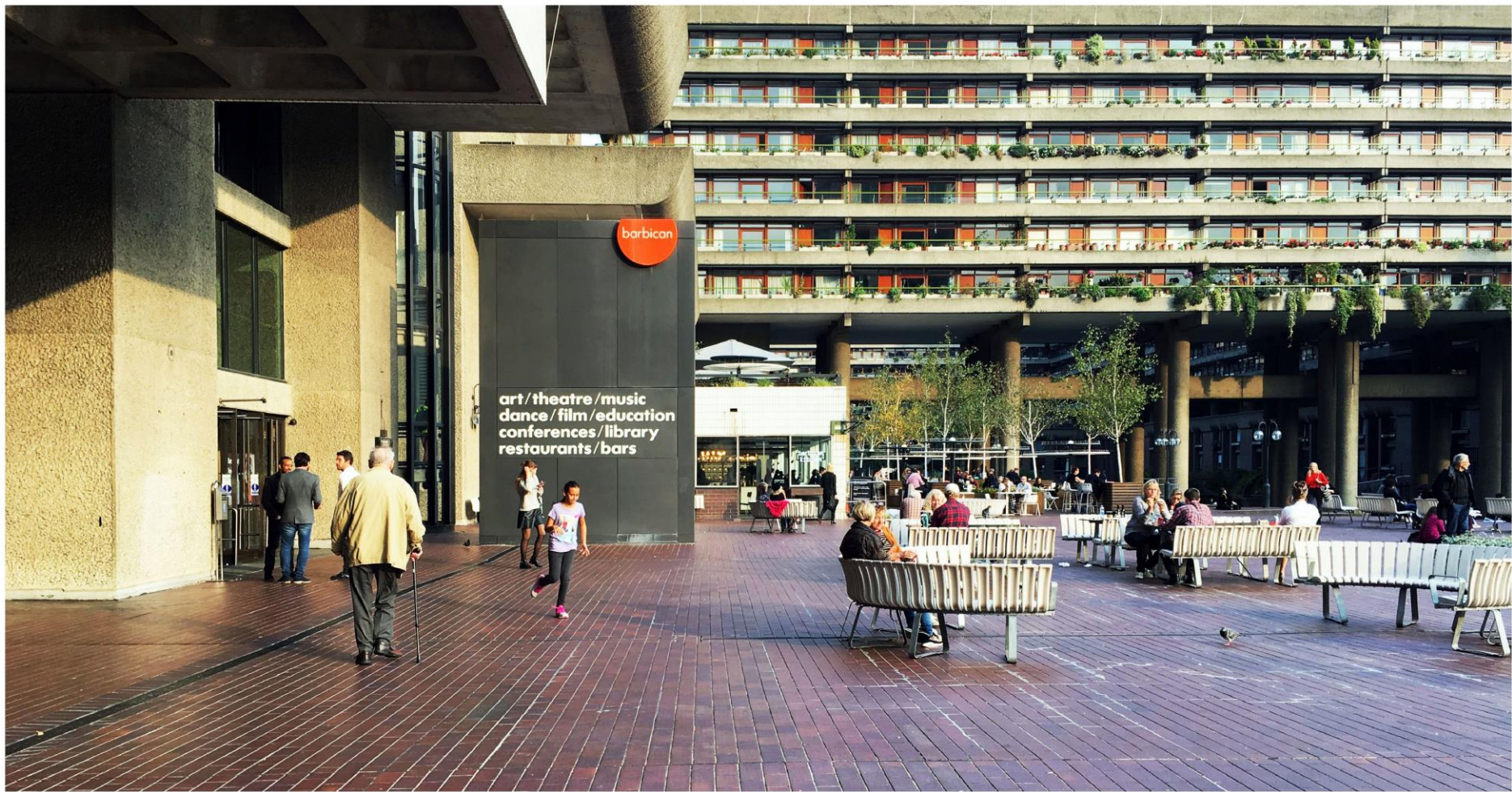
Motionspot bathroom / London



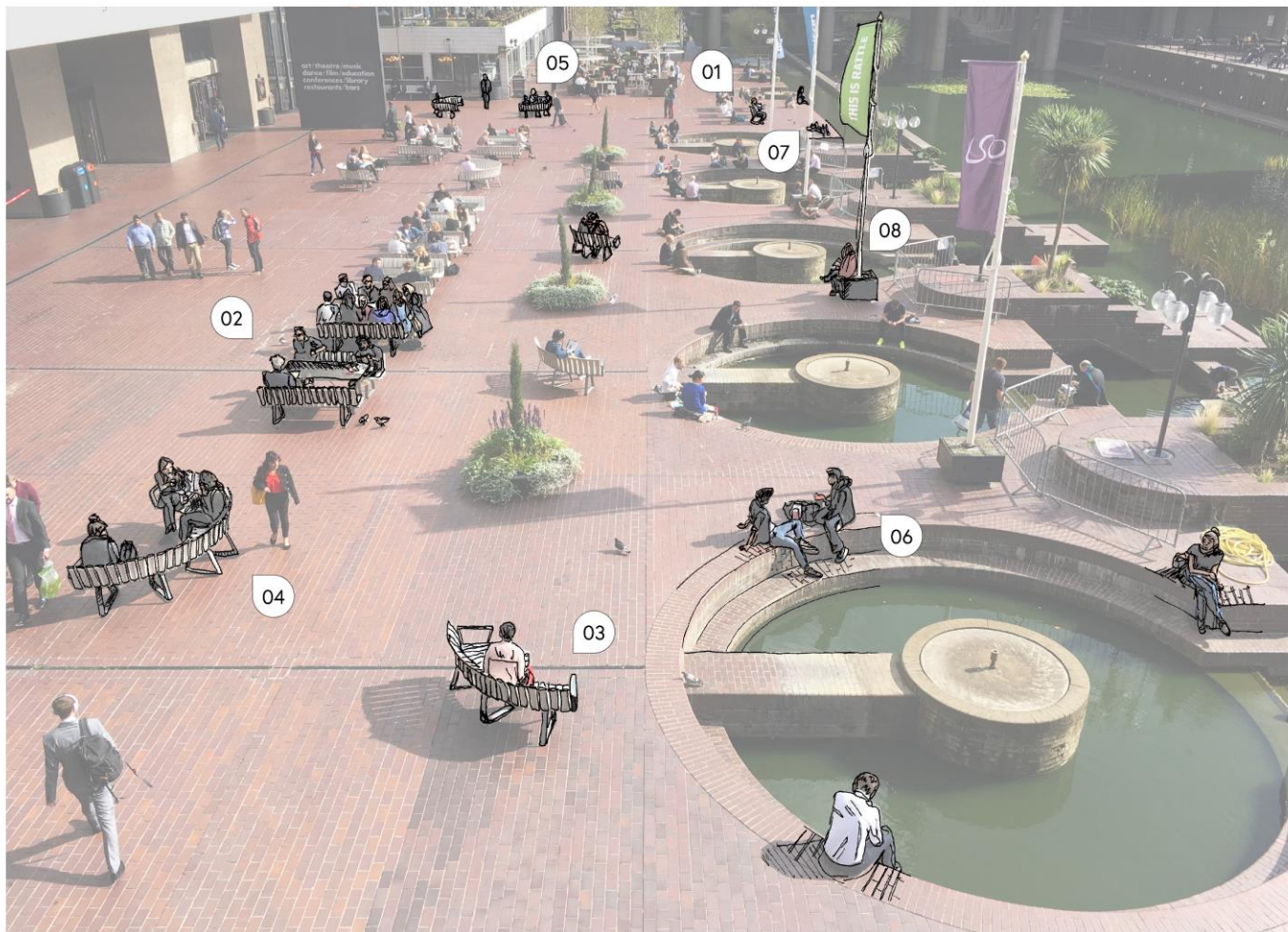


Chobham Manor / PRP





Barbican Centre / Chamberlin, Powell and Bon

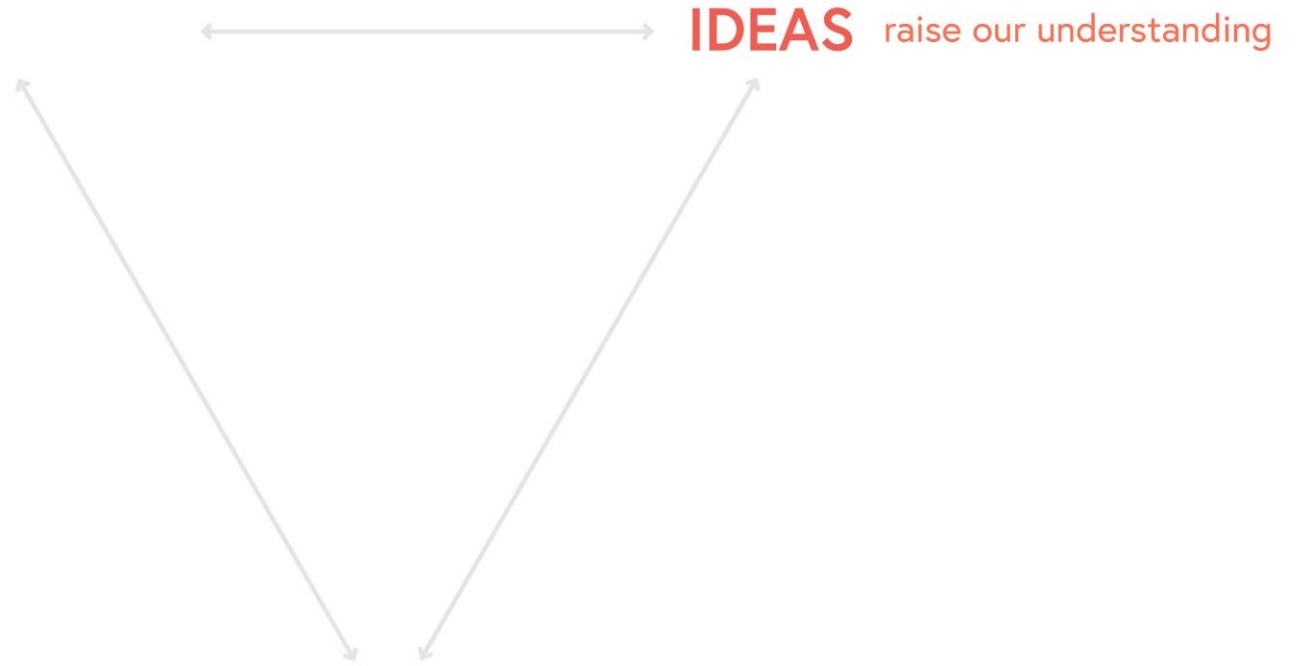


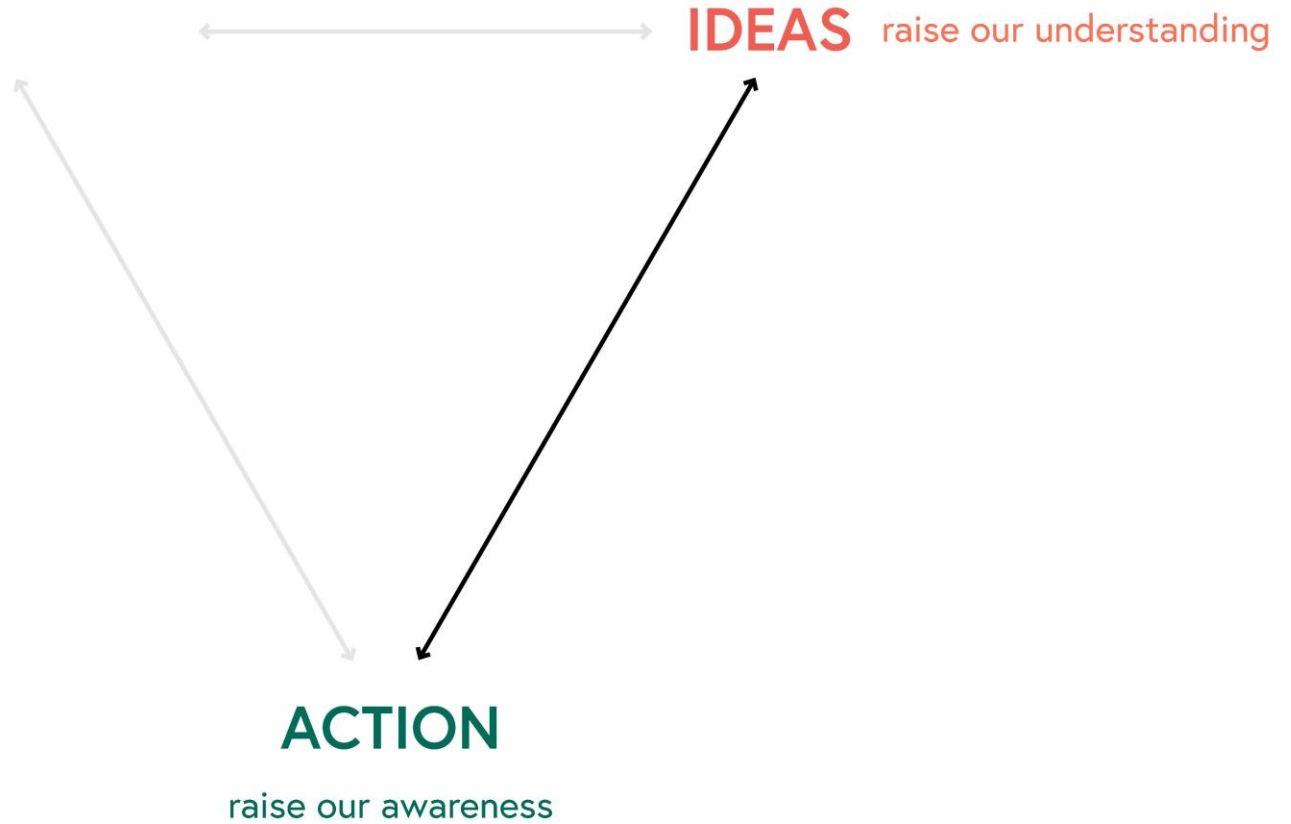
Barbican Centre / Chamberlin, Powell and Bon



**HOW CAN WE DESIGN  
MORE DESIRABLE  
FUTURE-PROOFED HOMES?**







raise the standard

**ADVISORY**



**IDEAS**

raise our understanding

**ACTION**

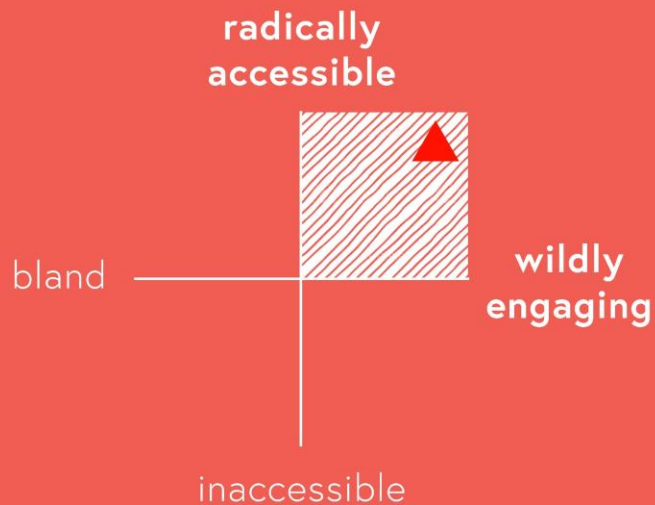
raise our awareness

needs + wants

supportive + empowering

radically accessible + wildly engaging

# THANKS!



let's chat:

Carly / [cdickson@mit.edu](mailto:cdickson@mit.edu)

[raweproject.com](http://raweproject.com)

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**HOME OF  
2030**

# HOME OF 2030

**Gwyn Roberts,  
Head of Housing and Policy, BRE**

**bre**

# ABOUT HOME OF 2030

**Home of 2030** is a design and delivery competition created to drive innovation in the provision of affordable, efficient and healthy green homes for all.



# PARTNERS



# BRE

Raising standards in housing and the built environment since 1921



CHRIS & SALLY'S HOUSE  
EXISTING TWO UP, TWO DOWN COTTAGE



# BRE AND HOUSING



**1968 - Present**  
UK Housing  
Survey Analysis  
and Indicators



**1997 - Present**  
Influence  
Government  
Policy



**2006 - Present**



**2017**  
Influence the  
financial sector



**2018**



**2018**

**1921 - Present**  
Research &  
Development  
programme

**1992 - Present**  
SAP + EPC +  
BREDEM



**2005 - Present**  
BRE Innovation Park  
20k visitors a year



**2013**  
AIM C4 project



**2016**  
Brazil social  
housing



**2018**  
HomeWorks

Our Future



# SOME POLICY CONTEXT TO HOME OF 2030

## Health and Ageing

- NHS Long Term Plan
- Healthy New Towns Guidance

## Green Homes

- Clean Growth Strategy
- Future Homes Standard consultation
- DEFRA 20 year plan and Environment Bill

## Holistic

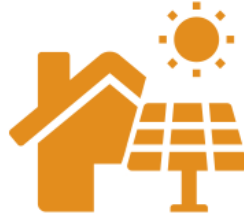
- NPPF and Design Guide
- Home England Strategy
- Green Finance



# THE CHALLENGE



We spend **75%** of our lives indoors,  
homes are vital to our health and  
economy



We need to cut energy use in new  
buildings by **50%** by 2050



65 years and above is the fastest  
growing age group in our society



# STARTING NOW;

- **Innovation Challenge**  
now live (until 13<sup>th</sup> Dec)
- **Young Person's Design Challenge**  
(until 28<sup>th</sup> Feb)
- **Design Charette (now!)**





# INNOVATION CHALLENGE

The Innovation Challenge is an opportunity for innovators to participate in Home of 2030 and secure support for further development. It is open to businesses with systems or products which will address one or more of four themes.

- Inclusive Living (ageing population)
- Building Performance (low environmental impact)
- Smart & Digital Technologies
- Scalability

**Winning entries in each theme will be awarded a prize of up to £10,000.** Entrants to the Innovation Challenge who meet the challenge criteria will be included in a directory of market ready innovations. The directory will be provided to the entrants for the two-phase Design and Delivery competition in 2020.



# YOUNG PERSON'S DESIGN CHALLENGE

We are asking young people to **let their imaginations run free** by designing an innovative and inspirational green home that meets the changing needs of future generations.

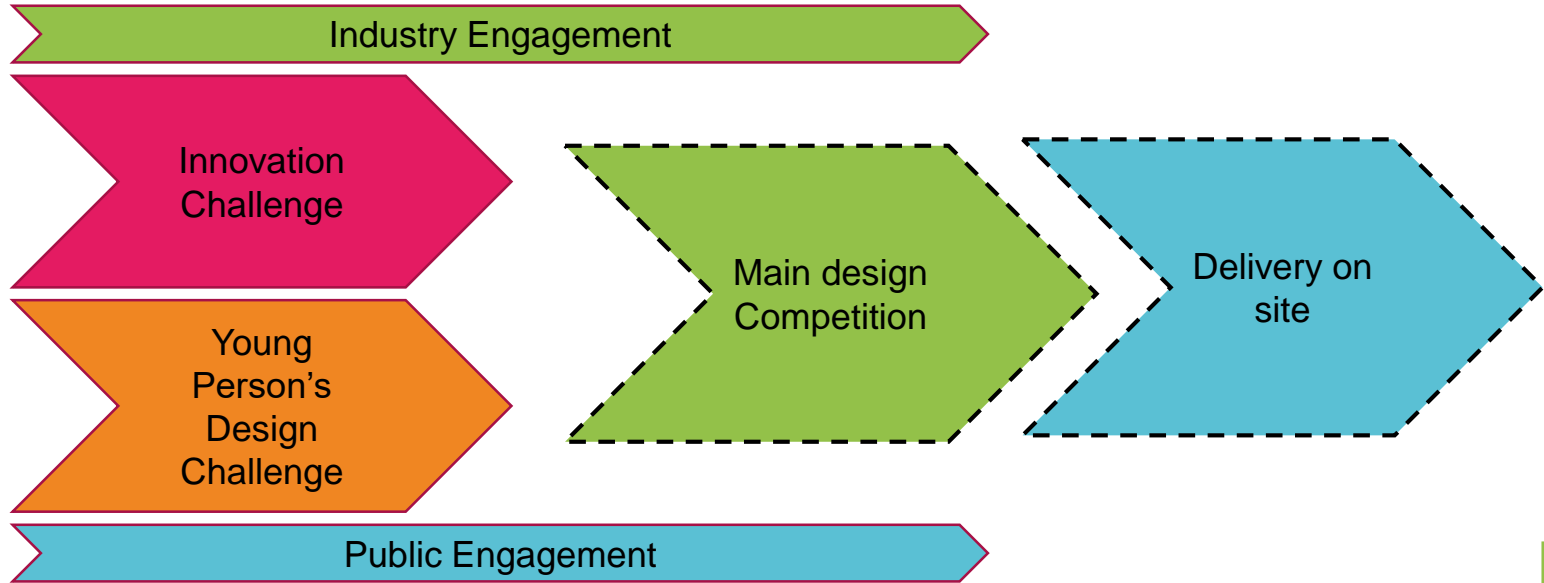
The challenge is open to young people aged 11 to 25, including those in Further and Higher Education.



# TIMELINE

2019

2020



# GET INVOLVED

- Visit Stand H671
- Register your Interest on the Home of 2030 website – [www.homeof2030.com](http://www.homeof2030.com)
- Follow us on Twitter @2030home and **join the conversation** #Homeof2030





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2030

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**Because ageing should be a lifestyle choice...**



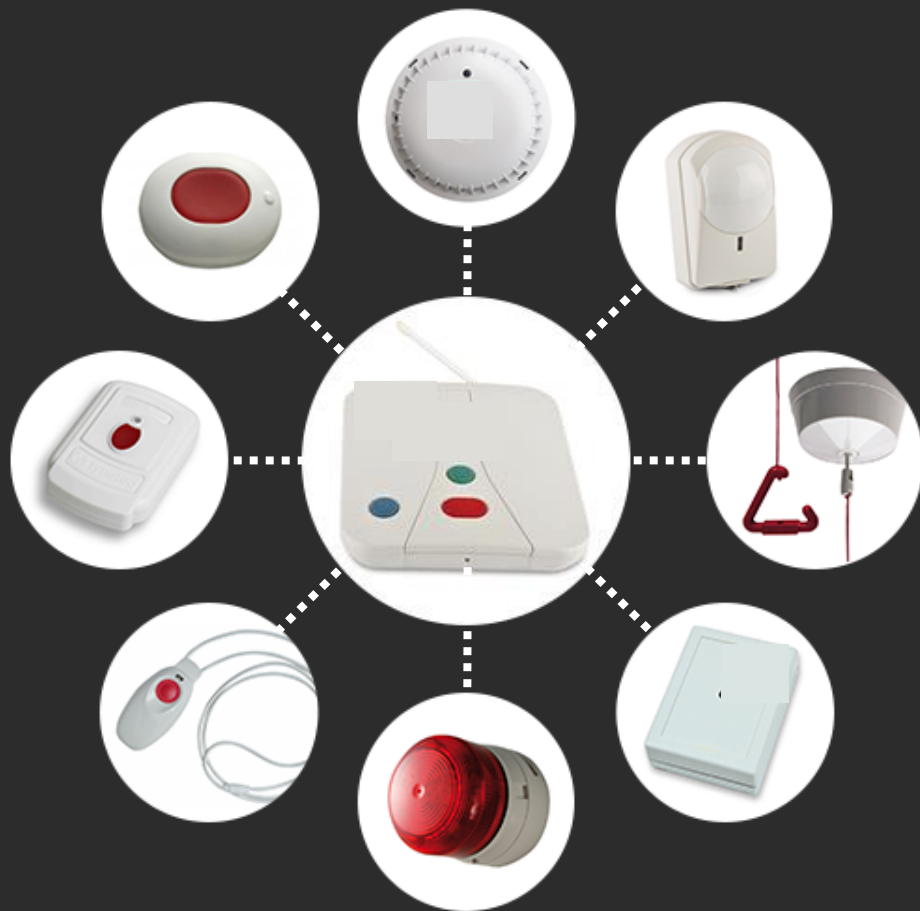
Market-leading AI-driven IoT software ecosystem keeping vulnerable people safer in their own homes

#21stCenturyTelecare #CareTechNotTelecare #GrowingOldDisgracefully

# The Old World - Telecare

Because the underlying *principle* of telecare is spot on, but it's execution isn't.

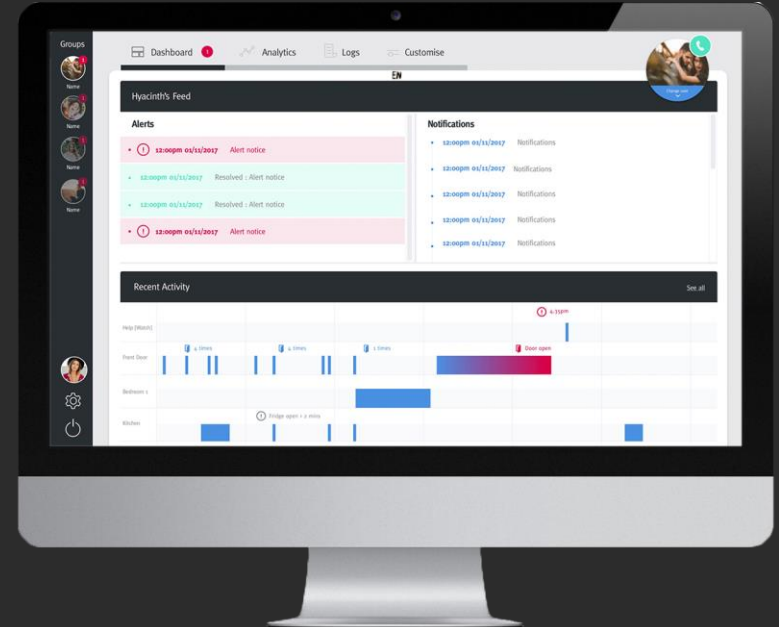
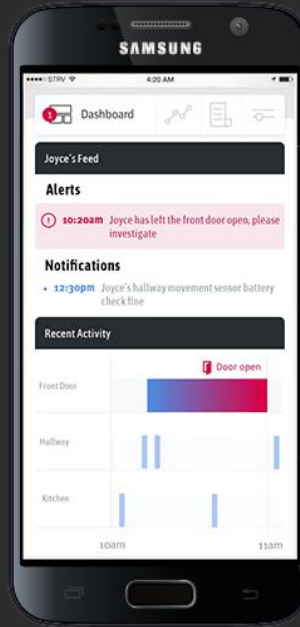
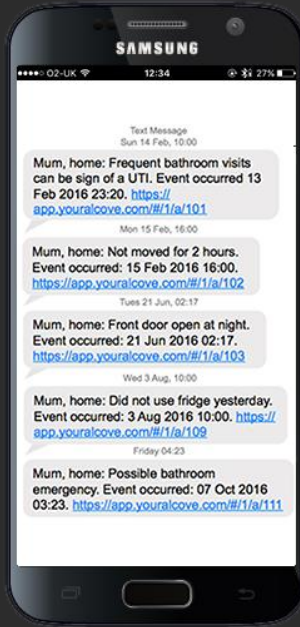
How do you keep people living independently for as long as possible and avoiding institutionalised care by connecting devices and serving up alarms to a monitoring centre?







# Smart Care via Portal – In the Palm of a Carer or Monitoring Centre



Plus Smart Care Via Voice – Carer Check In & Repairs, Help

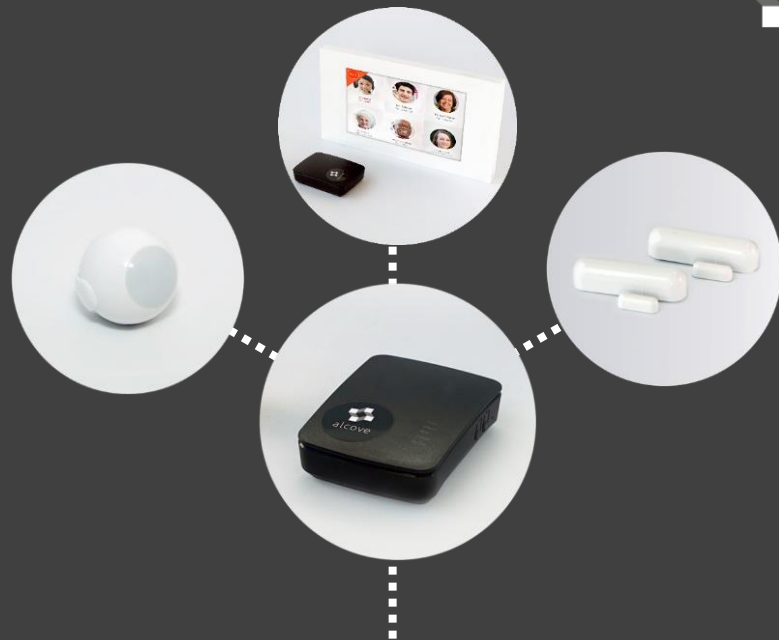


# Mr W's Story

Mr W lives alone and suffers from frequent falls. Despite having a telecare pendant, he often forgets to press it or simply doesn't want to bother anyone. As a result, he often waits for someone to find him after a fall rather than calling for help. With one incident ending in a fractured wrist, this is a major point of concern.

Although they try to visit as frequently as possible, his son and daughter worry constantly about their dad.

- ❖ Motion and door sensors installed throughout Mr W's home provide a layer of reassurance and allow his family to check-in on him at any time.
- ❖ Having the video carephone has also given Mr W the ability to call his family quickly and easily, and an Alexa allows him to listen to music and explore his interest.
- ❖ Overall, the system has had a positive impact for Mr W and his family, giving them peace of mind and reassurance when they are not with their dad.



- ✓ Quality of life
- ✓ Greater independence
- ✓ Increased peace of mind
- ✓ Enhanced safeguarding / sense of safety

A person with short white hair, wearing a light-colored t-shirt, is seated in a wheelchair. They are facing away from the camera, with their arms raised high in the air. The setting appears to be a bright room with large windows in the background, possibly a hospital or a care facility. The overall image has a soft, slightly faded appearance.

## Quote from Mr W's son:

“The system is proving very useful in tracking what he’s up to, even just viewing activity when he’s not answering the phone. I can see that he’s upstairs, so I wait until he returns to the kitchen or lounge and then call him. And just to ensure that he’s up and about. Also, he was supposed to be out yesterday afternoon, but I noticed constant movement, so I called him and established that my sister in law had changed the plans, so he was still at home.”



## Mr & Mrs T's Story

Mr T suffers from dementia. They were recently offered a six-week ECL Care and Support Service which they decided to refuse. At this time, Mrs T feels she can manage her husband's needs and would prefer not to have carers coming into the home.

Due to his condition, Mr T frequently becomes active in the early hours of the morning. On occasions, his wife has woken in the night to find that he has urinated on the bathroom floor or gotten fully dressed to go out. As a result, they both suffer from poor quality of sleep, leading to exhaustion and stress.

- ❖ So Mrs T can be informed promptly when these situations arise, movement sensors have been installed in Mr T's bedroom, shower room, toilet and kitchen, along with a door sensor on his wardrobe door. This allows Mrs T to monitor her husband's activity and promptly identify and manage any incidents, leading to better rest and less stress.
- ❖ A video carephone also allows the couple to quickly call their son or nephew should they need help in an emergency.



- ✓ Quality of life
- ✓ Greater independence
- ✓ Family member acts as responder
- ✓ Enhanced safeguarding / sense of safety



## Mrs M's Story

Mrs M lives alone and has experienced falls due to limited mobility. She recently had a UTI which made her more confused and unsteady. As a result, her family became increasingly concerned about her welfare.

- ❖ Her daughter was interested in having the movement and door sensors to monitor what her mum was doing each day, and an alert that informs her if the front door has been opened at night.
- ❖ An Alexa allows care staff to “Check-In” to the device so visits can be monitored, allowing ECL to obtain evidence of how long staff are spending supporting Mrs M so they can plan her ongoing care needs.
- ❖ A Video Carephone was also installed, which has allowed her to video call her daughter and see the work she has had done on her garden which Mrs M has been unable to go and see due to her current health status.



- ✓ Quality of life and peace of mind
- ✓ Greater independence
- ✓ Family member acts as responder
- ✓ Enhanced safeguarding / sense of safety

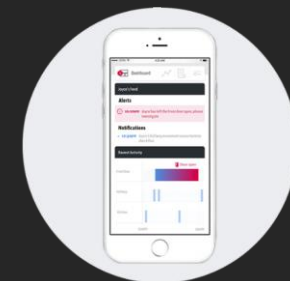
# #CareKeptClose Garden Lodges Powered By Alcove

Problem: too many older adults living for longer set against a backdrop of not enough care homes, care home fees going north of £40k and a huge funding gap.

## INTRODUCING... A NEW WAY TO THINK ABOUT ELDERLY CARE

Beautiful, comfortable, self-contained living spaces that can be built in the garden of the family home fitted out with an Alcove #carestation and an optional care package so you know your loved ones are being looked after – and within arm's reach.

Available to buy or rent, our fully furnished garden lodges come equipped with a voice and video calling carephone, falls button, motion sensors, door sensors, chair and bed occupancy sensors, and “Press Me” buttons for calling for help or to request assistance straight to the family so that peace of mind is maximised and mum can live a truly fulfilling life close to her loved ones.





#GrowOldDisgracefully. That's an order.



alcove

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