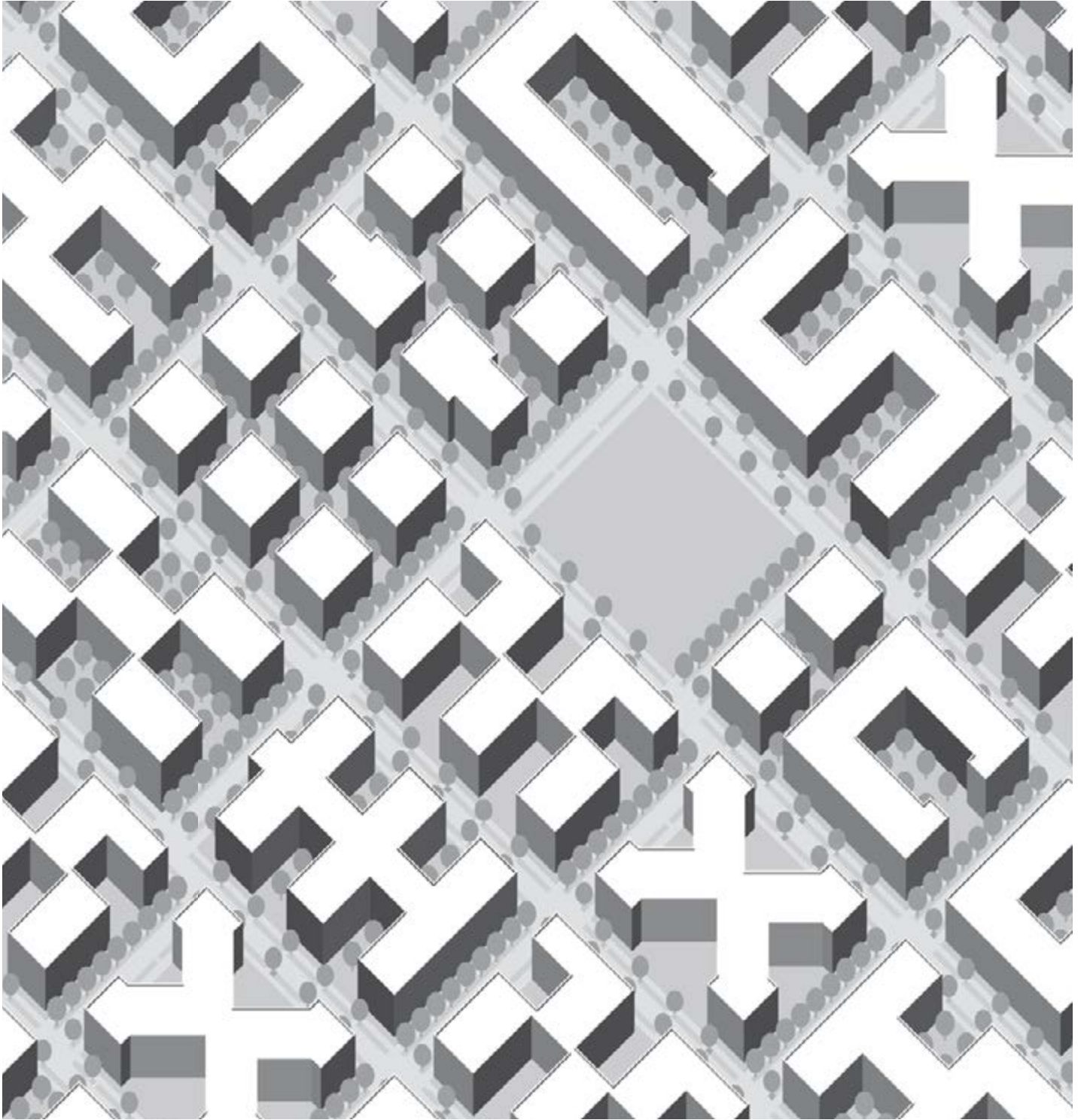


MACCREANOR LAVINGTON



DESIGN THINK TANK

A Comfortable Home

LSA | 2021-2022

WHAT?

Lockdowns

Nearly two years into most of us spending more time at home than most generations before, we've become intimately acquainted with the best and the worst features of our homes and neighbourhoods. With this enforced focus on homelife many have re-evaluated their lives, moved home, changed their home in some way or left our city for the short or long-term. Now is an opportunity for us as architects to re-evaluate our approach to housing and home, to refocus on what is really important. The response to the pandemic has shown that the rapid change that will be needed to address the climate emergency is possible and our city still needs to address the Housing Crisis with more urgency.

For many, the lockdown home became a trap, with the familiar escape of the workplace, school, library or pub no longer available. Things that were relatively important when we had spent less time at home became a major annoyance, whether it was external noise pollution or poor ventilation. However there have also been positives: the earliest phase of the first lockdown showed what our city could be like with fewer cars on the road and we have seen the public realm adapted rapidly to accommodate more space for cycling and walking, although there is still much more to do.

The lockdowns of 2020 and 2021 served as an acute reminder that our housing stock, including some of our most recent housing, is not fit for the climate emergency, as highlighted again in the Climate Change Committee's recent report to Parliament:

“UK homes are largely unprepared for climate change. The Government now has an opportunity to act. There must be compliance with stated building designs and standards. We need housing with low-carbon sources of heating. And we must finally grasp the challenge of improving our poor levels of home energy efficiency. As the climate continues to change, our homes are becoming increasingly uncomfortable and unsafe. This will continue unless we take steps now to adapt them for higher temperatures, flooding and water scarcity. Our report shows that this work has barely begun”

Baroness Brown, Chair of the Adaptation Committee of the Committee on Climate Change <https://www.theccc.org.uk/2019/02/21/uk-homes-unfit-for-the-challenges-of-climate-change-ccc-says/>

Density

The urban renaissance of the past twenty years has seen permissible housing densities in London double every few years. This has in general been a positive shift to increase densities from the bizarre car-dominated suburbia of the 80's and 90's that can be found on the Rotherhithe peninsula and all across the country. But we should now ask whether this trend has gone too far and what is happening to the space for nature and people within our city. How intense do we want our city to be?

The system

We now have a system of housing provision that is largely led by private speculative development. A system that is highly regulated by policy makers to force the finance in this system to deliver the elements of a balanced and equitable city that can be codified in regulation and delivered through the now highly complex system of negotiation and enforcement that is our planning system. But is this system really delivering the homes and places we need for now and that we will need for the future? Or does it result in an aesthetically pleasing but largely unsustainable compromise?

The planning system has over the last decade achieved a real step change in the quality of homes that we build, helping shape the so called New London Vernacular. We now clad new buildings in robust materials and plant trees in their courtyards. Our new homes are quite spacious (in comparison with the past) and come with large windows and balconies, although they seldom face more than one direction. They are well-insulated and come equipped with advanced ventilation and heating systems. What is not immediately obvious is that this vernacular of over-engineered single-aspect homes has made or will make them somewhat unliveable as our climate changes. Deeper than a Georgian or Victorian terraced house, our single-aspect homes are dark at the back, no matter how large are their windows. Those windows, if visually pleasing, generate more solar gain than the non-existent cross ventilation can neutralise.

Challenge

Of all building types, a housing block is the most controlled, with building regulations, planning policies and developers' viability models leaving little room to manoeuvre. Too often, it turns the creative process of designing a home into an exercise in trying to fit standardised furniture defined by regulation inside a smallish room. This most frustrating task, performed by a young architect, is nevertheless crucial to the success and failure of housing as a model. It ensures that a housing unit can act as a home to a group of friends living together, an orthodox religious family or an elderly couple.

The resultant pattern book of identikit flats makes it very hard to deviate from and to spatially address the climate emergency, or indeed the changing needs of residents. We will examine this default pattern book and propose what might be possible if we could make changes to this rulebook that would make it fit for the future while also recognizing there is a the social, political and economic reality to the system that we operate within.

We will look at instances where the typology may adapt (e.g dual-aspect homes) and where the rulebook needs to change (e.g. minimum space standards - is this the right measure and accommodating nature) to achieve a comfortable home for all (or at least the majority).

HOW?

Our research will be practical and led by design. Instead of spending months researching academic literature and planning policies to define an universal home, we will seek to design it. We will start from a home and its constituent arrangement of rooms and then look at the building and the journey from the street to the apartment's door, and all the shared spaces within the building, and finally the building's place in the neighbourhood.

At each scale, we will investigate the environmental challenges that homes of today need to face, their diverse prospective residents and the market that makes them happen. We will use the lessons learnt from the process to begin to identify what needs to change for our society to deliver housing fit for the climate emergency.

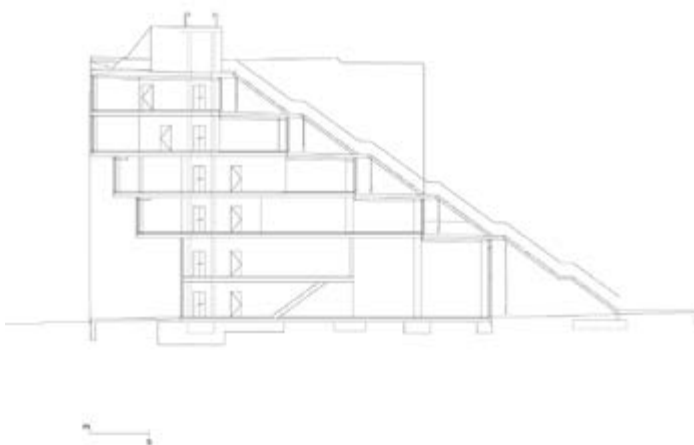
Research will proceed through design and observation, as an exercise the Design Think Tank will approach the design of the home and the block from the inside. This approach will be split into three parts:

The Home

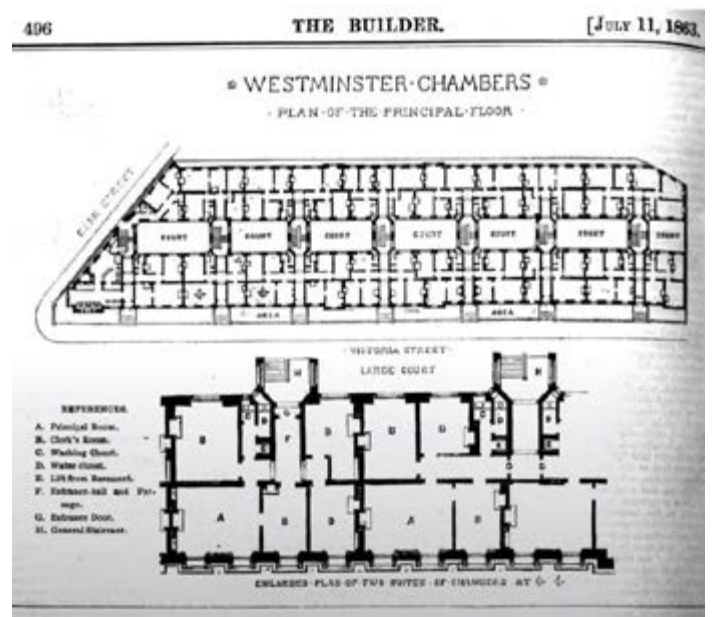
The Home, including its arrangement of rooms, a balcony or other amenity space, and the location and orientation of windows.

We will work generally within the rules that apply to housing in London but we will make a couple of exceptions:

1. All homes will be required to be truly dual-aspect, which means they should have windows on the opposite sides of a building;
2. We will treat the Nationally Described Space Standards as a minimum and as guidance we will allow an additional 20% increased on the minima. It should be noted that more space will not always be good, as all space will need to be heated and will for the time being have a carbon content in its creation. Well planned space will always be more useable.
3. We will also consider in more detail the role of the workplace in the home, with many or even most office workers are still working from home for at least part of the week and this has a space implication. But also we should consider that other types of work may be possible from home and have always formed part of the home, be it in a form of artist ateliers or weaver cottages.



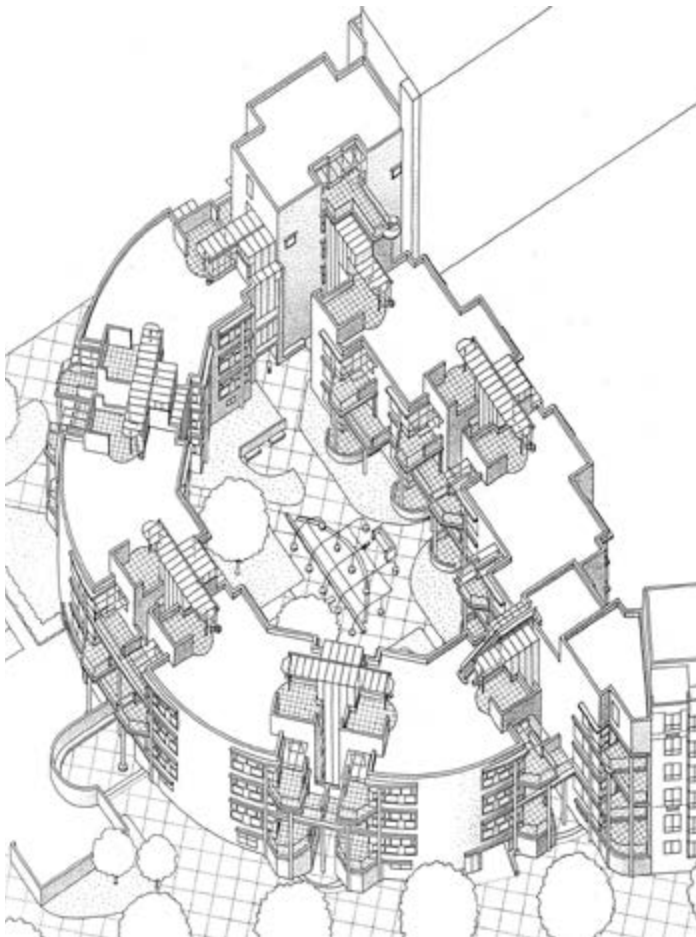
Terrassenhaus Berlin Lobe Block by Brandlhuber+ Team. Source: Archdaily



Westminster Chambers by Banks & Barry. Source: MTWA

The Common stair

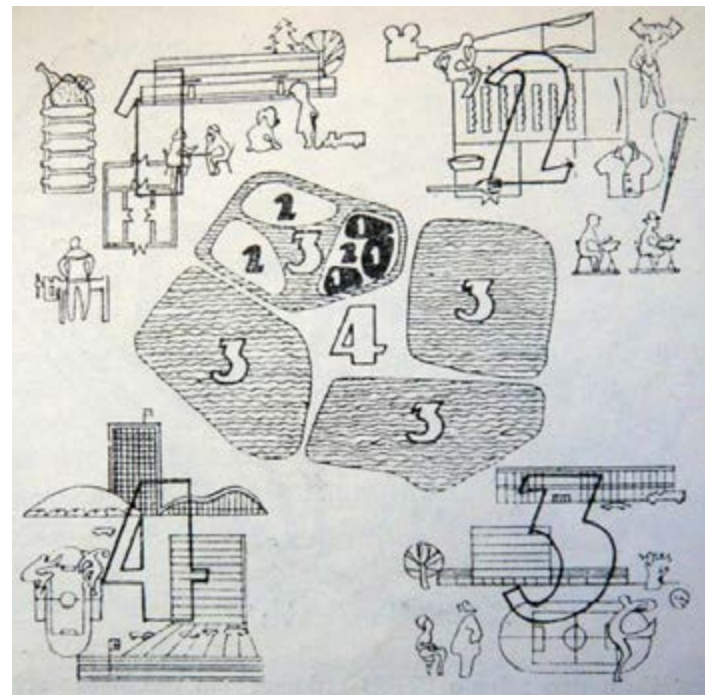
The design of the shared spaces that connect the home to the street entrance and which link the homes into a building, block and community. These start with the entrance lobby, and stair but include the lift, access decks, communal amenity in courtyards and maybe roof terraces as well as the more mundane things that make the places we live work, such as bin stores, bike stores, post boxes and car parking if we need it.



Lindenstrasse, Berlin by Herman Herzberger. Source: AHH

The Home in the City

The final stage is the connection back to the city from front door to street to neighbourhood and city. We will evaluate the 15-Minute City concept and consider whether it sufficiently addresses the specific needs of the climate emergency in Rotherhithe.



1964 Innovative Urban Planning Ideas. Source: Jonas Minkevicius

WHERE?

The once-industrial area around Rotherhithe is in the midst of its fourth major transformation. This historic riverside village, first turned into the engine of the Empire and then a sleepy suburb, is now gradually evolving to become a major town centre focused around Canada Water. Workspaces, leisure and retail venues will co-exist with high-density housing set among retained or infilled docks. The docks remain as the only remnants of the once mighty industrial centre that catered for the British Empire. The largely defunct area was turned in the 1990s into suburbia of three or four storey developments that contrast markedly with the towers currently built. It equally contrasts with the type of development seen across the Thames around Canary Wharf and South Quays where some of the densest housing ever built is being constructed.

We propose to identify a site on the edge of the emerging Canada Water Masterplan, a place where one can still read the multiple layers of Rotherhithe's transformation. To inform our understanding of the site, we will look at the differences in the way that the Rotherhithe Peninsula and the Isle of Dogs have developed since the docks closed, and in particular at the contrast between the excesses of South Quays and the car-orientated suburbia of the Rotherhithe peninsula.



Canada Water Masterplan Source: British Land

WHEN?

Week 1

1. A South London housing walk:
 - Blackfriars Circus
 - Elephant Park
 - Varcoe Road
 - Porter's Edge
2. Policy research:
 - GLA, 2010, London Housing Design Guide
 - GLA, 2020, London Plan Housing Quality and Standards
 - LETI, 2020, Climate Emergency Design Guide
 - Committee on Climate Change, 2019, "UK housing: Fit for the future?"

Week 2

1. Design exercise: Designing a room
2. Site research: Site appraisal
3. CPD with Maccreanor Lavington staff: TBC

Week 3

1. Design exercise: Designing a home
2. Site research: Site brief
3. CPD with Maccreanor Lavington staff: TBC

Week 4 - Symposium 1

Themes to present

1. Vision for the home fit for the changing climate
2. Site analysis
3. Spatial and functional building brief

MATERIALS

Watching List

- Smithson A. & P. (1970) The Smithsons on Housing: <https://www.ajholmesrobinhoodgardens.com/the-smithsons-on-housing>
- Newman, O (1980) Defensible Space https://www.youtube.com/watch?v=9OMH7N_6nCE
- Wiseman, F. (1997) Public Housing

Reading List

- Hertzberger, H (1991). Lessons for students in architecture. Rotterdam: Uitgeverij 010 Publishers. Harvard
- Levitt, D., & McCafferty, J. (2019). The housing design handbook: A guide to good practice.
- Leupen, B (2011) Housing Design - A Manual, NAI Publishers
- Hans van der Heijden (2017). Post Piraeus: About the building site and the city . De Architect
- Christopher Alexander (1965) A City is Not a Tree. In: Architectural Forum, Vol 122, No 1, April 1965, pp 58-62 (Part I),
- Buchanan, Peter (2013) Neighbourhood as Extension of the Home In: Architectural Review
- Buchanan, Peter (2020) Architecture and the City in the Emergent Era In: Architektura Murator Plus
- Ratey and Manning (2014) Go Wild
- Aureli, P.v. And Tattara, M. (2015) Production/Reproduction: Housing beyond the Family. Harvard Design (41). Available online at:<http://www.harvarddesignmagazine.org/issues/41/production-reproduction-housing-beyond-the-family>
- Evans, Robin (1978) Figures, Doors and Passages, in *ibid*, 1997, *Translations from Drawing to Building and Other Essays*, London: Architectural Association.
- Hayden, D. (1982) *The Grand Domestic Revolution*. Cambridge, Massachusetts: The MIT Press.
- Preciado, Paul B (2004) "Pornotopia." In *Cold War Hothouses: Inventing Postwar Culture, from Cockpit to Playboy*, edited by Beatriz Colomina, et al. New York, NY: Princeton Architectural Press, pp. 216 – 253.
- Rawes, P. (2017) Housing Biopolitics and Care. In A. Radman and H. Sohn (eds.) *Critical and Clinical Cartographies: Architecture, Robotics, Medicine, Philosophy*. Edinburgh: Edinburgh University Press. pp. 80-100.
- Wigley, Mark, Untitled: The Housing of Gender in Colombina, *ibid*.