CRAFT AS STANDARD

A design guide for affordable housing in England

Emily Hadley Student Number: 190169

Personal Intentions & Acknowledgements

England's housing crisis is a generational problem the rocketing property prices are beyond the reach of most young people; I am one of them, despite my now comfortable very middle class life, education and career. I am interested in exploring this problematic, felt both at the level of society and at the level of the individual, through my profession. To really ask what is the role of the architect when dealing with this crisis, and to look at ways to go beyond the traditional methods of practice to find solutions.

It is unlikely that I will be able to travel back home to England during this project due to COVID-19 travel restrictions. Cornwall, the chosen site is a place a grew up in so I have a personal understanding and relationship with the region. However I will endeavour to ensure that I understand the impacts of the housing crisis there properly by building a dialogue over the next few months with author and housing campaigner Catrina Davis. Thank you Catrina for engaging with me and my ambitions project.

I would also like to express my sincerest thanks to my old tutors Anthony Engi-Meacock and Giles Smith (of Assemble) for their continuing support, and never ending chats about how to change the architectural profession.

To my tutor Christine Bjerke, thank you for all of the advice in the writing of this program, and for everything going forwards into this semester. And thank you to Cameron Clarke for all of the references.



Mackerel On A Plate, William Scott who was associated with the St. Ives School of Art. Describing his paintings Scott said 'I find beauty in plainness, in a conception which is precise, a simple idea'. This painting hangs in the Tate St. Ives. Source: Tate Galleries.

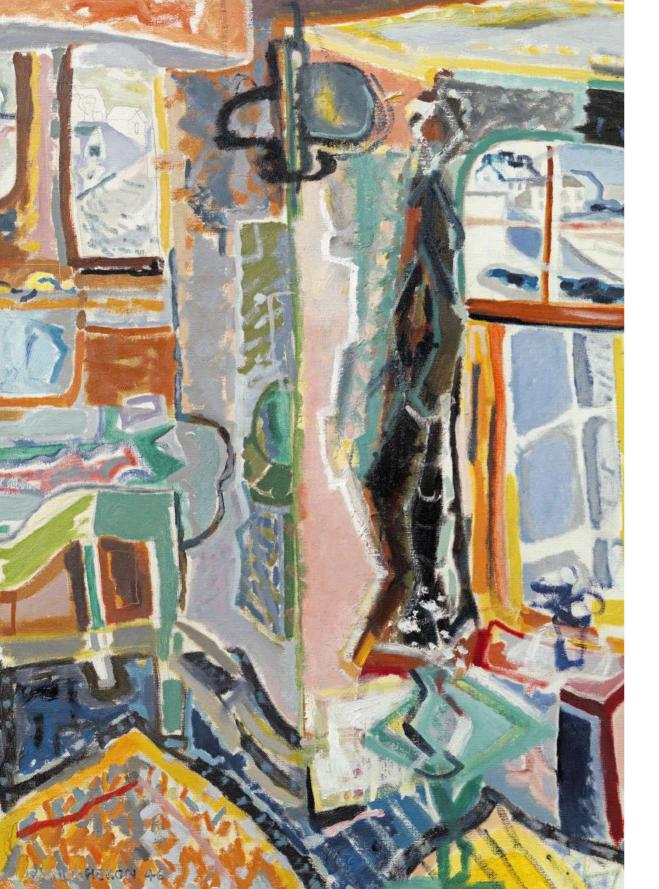
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Emily Jane Hadley | 190169 Urbanism and Societal Change | IBBL Royal Danish Academy

Thesis Spring 2021 Tutor: Christine Bjerke Unit Director: Deane Simpson



I understand that "business" might be necessary to produce the amount of housing that we need in the world, but we can't forget that housing is a human right. Houses are not just for sale. Houses are for people, and we have to think of them first and last.

- Tatiana Bilbao, A House Is Not Just A House

<u>0. Executive Summary:</u> <u>Craft as Standard</u>

The shift of the value of a house from being a home to a commodity has lead to the practice of housebuilding in England to become profit lead. It is the people who are paying the price for this. We need to create a new value system for housing. One that considers both the spectrum of new ways in which we use our homes, and values the environment in relation to the urgency of the climate crisis. We must introduce a of a new set of standards going forwards.

This diploma project will build upon the research I carried out for my written thesis titled, *Craft Craft Craft. Good Design For Everyday People:* A Case For Crafting Housing:-

As architects we have a responsibly to provide access to good design through the architecture we create. Everyone deserves to live in a good house. The current housing crisis highlights a need for better quality affordable housing in England. This should be achieved through crafting the housing stock: to both repair what is existing and to be considerate when designing anew. "Volume housing" puts a focus on profits for developers, with the speed of construction and high-density plot-ratios as a preference, instead of considering the long term lives of the families who will inhabit the spaces. Good housing considers not just a single house, but the neighbourhood it builds. The architecture is as much about society as it is about the built environment.¹

1. Author (2020) Craft Craft Craft P.40

1. Author (2020) Craft Craft Craft P.2 This diploma project will ground itself within the current conditions of the housing crisis in England, and suggest a potential new model of volume house building which would deliver both **quality and quantity**.

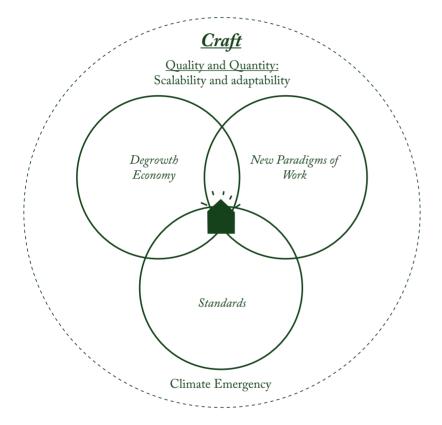
It will be in response to the proposed planning reforms made by Prime Minister Boris Johnson in June 2016, '*Build Build Build*' in which he seeks to recover the country's economy after COVID-19 by building great volumes of affordable homes. This is a strategy that has been widely criticised by the architectural profession, with concerns over the quality of all these new homes.²

The realities of housebuilding are complex. Therefore, this diploma project will situate itself in the considered societal thematics of: degrowth economy, new paradigms of work, and standardisation of architectural practice. Whilst considering the larger thematics of craft, the scalable application of the proposals, and (last but not least) the climate emergency. (see fig 1 on next page)

It will seek to propose a strategic approach to developing a new model of volume housebuilding, made up of smaller interventions that can added together and be scaled up to provide appropriate solutions. Developing a general strategy in the form of a 'Pattern book' which will set out design principles and practice for building within the parameters established in the *Societal Themes* section of this program. The established design principles will then be explored through site specific architectural proposals, at both the neighbourhood and architectural scale, considering the concepts of local identity and agency in relation to housing — and crafts role in this. (see fig 2 on next page)

The site chosen to develop the strategies is a town called Penzance in Cornwall, Southwest England. The town is the most western in the UK and has a feeling of being at the end of the world. Its remoteness gives this feeling that it is forgotten by political powers in Westminster (475km away), yet also creates an incredibly tight-knit community that is incredibly proud of it's local culture. The housing crisis is acutely felt here as a result of the problem of affordability due to insecure local economy after a recline of industry in the region, and an inflation of house prices (due to land prices and a growing numbers of second homes in the area). Therefore, the proposed new models will also explore how housebuilding can support local communities their economies.

Finally, this diploma project will considered both **new build** and **adaptation principles** when proposing new models for housing.



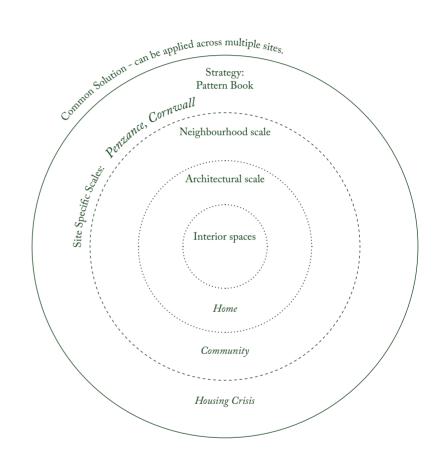


Fig 2: Symbiosis of scales in the project from the general strategic scale of proposed housing policy to the personal architectural scale of the interior spaces of the home. Due to the nature of the complexity of this project all layers need each-other. Credit: author



Typical contemporary volume housing estates in England. Images source: Getty Images



<u>1. Societal Themes</u> <u>The Housing crisis in England and the UK</u> <u>Governments response</u>

The election of Margaret Thatcher's Conservative government in 1979 put an end to England's heroic era of social housing provision postwars. Over the next four decades successive governments put faith in the private sectors capacity to build the number of homes Britain needed. But consistently that faith proved misplaced, and now the country faces a chronic crisis instigated by a shortage of supply. The housing shortfall has sent property prices rocketing beyond the reach of younger people and has led to record levels of homeless people.¹

Before 1979 50 per cent of the British population was accommodated by social housing. Thatcher's policies saw a shift from public provision to privatisation with a dramatic expansion of the right-to-buy scheme .Millions of homes were sold off, local authorities architecture departments were closed, and most public land sold — we are still feeling the impacts of these policies today. Most crucially to the affordability crisis is the escalating price of land.

To satisfy the demand, and to solve the housing crisis, Britain needs to build 300,000 homes each year, but the present supply is about half of that, as stated in the introduction to the House of Commons brief Tackling the under-supply of housing, 'Estimates have put the number of new homes needed in England at up to 345,000 per year, accounting for new household formation and a backlog of existing need for suitable housing. In 2019/20, the total housing stock in England increased by around 244,000 homes... still lower than estimated need'²

The government has proposed a series of approaches to achieve an ambitions 300,000 new homes a year in recent years, but the most dramatic was the proposed planning reforms by Prime Minster Boris Johnson in 2020 which seeks to get Britain building the required number of houses and build itself out of the post-COVID financial crisis.

1. Woodman, E. & Harper, P. (2018) Project Interrupted P.7

2. House of Commons Library (2021) Tackling the under-supply of housing in England 3. House of Commons Library (2021) Tackling the under-supply of housing in England

The British government sets out it's planning reforms through a series of 'Housing White Papers', the 2015 paper titled 'Fixing our broken housing market' was published in February 2017, it sets out "a comprehensive package of reform to increase housing supply and halt the decline in housing affordability." Identifying a threefold problem of "not enough local authorities planning for the homes they need; housebuilding that is simply too slow; and a construction industry that is too reliant on a small number of big players."3

Planning for the Future



UK Prime Minister Boris Johnson announces 'Build Build Build' program. Image source: The Times

4. The Guardian (2020) England's planning changes will create 'generation of slums'

The 2020 amendment saw the proposal of radical planning reform, 'Build Build Build' in which Land across England would be divided up into three categories: for growth, renewal or protection and planning applications based on pre-approved design codes in the applicable areas would get an automatic green-light to be built in an attempt to "cut red tape" in the current planning process in England aiming to speed up the time it takes for applications to be approved in order to build housing faster. It would see the reduction of planning

applications instead favouring a system of automatic approvals if the proposed building is in an area that meets certain criteria, and then design-codes implemented.⁴ This proposal has been highly controversial. As I have previously discussed in my writing for the written assignment:

"The Royal Institute of Architects (RIBA) criticised the reform saying that whilst it may help to get Britain building homes again there's 'every chance it could also lead to the development of the next generation of slum housing.' The UK was already experiencing a chronic housing-crisis. There is a substantial gap between the number of dwellings required by the population and the number available, homelessness is on the rise, the privatisation of housing — the shift from local authority lead schemes to a market favouring housing authorities and private developers — has lead to a poor quality housing-stock. "Volume housing" is produced across the country to attempt to meet the demand, but the design is poor, compromises made when materials and fixings are chosen to maximise profit, and spaces shrunk to their minimum to reach higher plot densities. The contemporary condition of new housing in England has so little quality, in every sense of the word architecturally, it has been coined as "the rise of the shoebox home"."5

And to bring the discussion of this proposal back to the question of craft in the housebuilding industry:

1. Societal Themes

(All of) the points above raise the question quality not quantity in new build housing. It is not just about the number of new houses required in England, but also ensuring they are good quality homes for people to live in. Which brings us back to the question of craft in architecture, and more importantly where is it in Johnson's great promise of building, building, building?^{3%}

Building Better, Building Beautiful

Furthermore, as an attempt to fix the quality of homes in Britain the government launched a commission called 'Building Better, Building Beautiful' chaired by Sir Roger Scruton. As described on the UK Governments website the commission, 'was responsible for developing practical measures that will help ensure new housing developments meet the needs and expectations of communities, making them more likely to be welcomed, rather than resisted, by existing communities.' With three aims: firstly, 'To promote better design and style of homes, villages, towns and high streets, to reflect what communities want, building on the knowledge and tradition of what they know works for their area.' Secondly, 'To explore how new settlements can be developed with greater community consent.'. And finally, 'To make the planning system work in support of better design and style, not against it."

Almost everything about this commission has had a controversial reception, starting with the name itself 'Building Beautiful' which bodes the question - whose idea of beauty? This inspired the theme for a whole series of evening debates at the Central Saint Martens architecture school in London titled, 'Fundamentals: Beauty'8 chaired by the architecture critic Oliver Wainwright.

This project will explore different solutions for the housing crisis and by creating new models for housebuilding - whilst staying grounded with the realities of the recent planning reforms, therefore will also explore the concept of adaptation to create new homes.

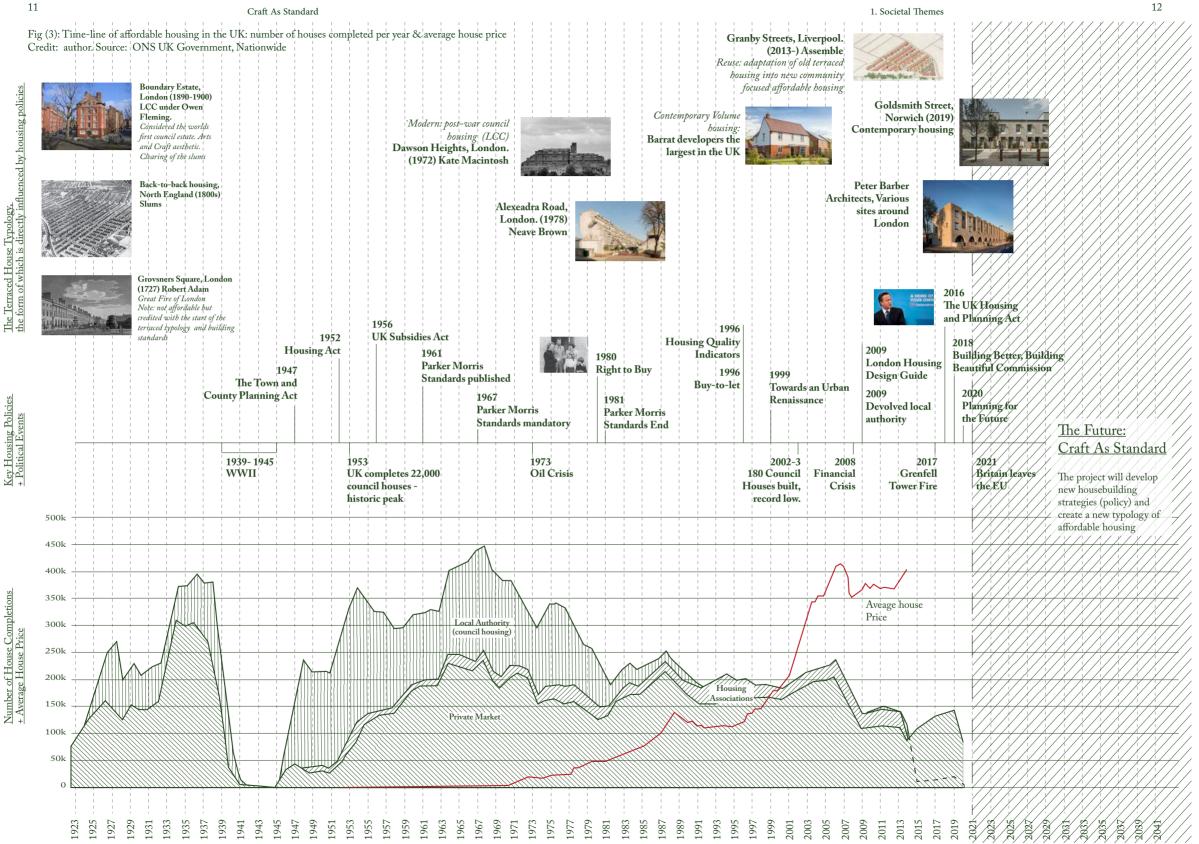
7. GOV.UK (2020) Building Better, Building Beautiful Commission

6. Author (2021) Craft

Craft Craft P.19



5. Author (2021) Craft Craft Craft P.18



Number of House Completions + Average House Price

The Case For A Degrowth Economy

The value of the home is increasingly placed by our society by the profit it will make when sold, not by the sense of belonging it provides, or the security, or memories within – arguably all more important currencies than sterling.

The problem of how we value housing is not exclusive to England, but it is everywhere within the context of globalisation and capitalism. Talking about her work in Mexico the architect Tatiana Bilbao wrote, 'The bigger question is how we start to design value into housing. While financial models and resale prices might be the indicator of value right now, we can imagine a better system in which value is actually determined by the quality of life in these homes.'¹ This is the exact same way value is calculated in the housing market in England, so therefore the exact same questions and re-imaginations can be applied. What does the architecture of a home look like when it is designed not to generate primarily profit but to generate a more benevolent system of quality?



Still from *The Impossible Hamster*, an animation which explains the dangers of exponential economic growth with a giant hungry hamster. Hamsters double in size every week for the first 6 weeks of their life, and then stop growing before turning into a monster. Source: NEF

2. Oslo Architecture Triennial 2019: Enough. The Architecture of Degrowth We are conditioned to think that economic growth is essential to survival, growth that is based upon consumption, and that without this growth the world would stop turning. But we know this is not the case and economic growth is restricted by the finite resources of the plant. Exponential economic growth is causing irreparable damage to the planet. By commodifying the home we are coupling it with environmental damage. For the sake of the planet we must find a new systems of value for the housing market.

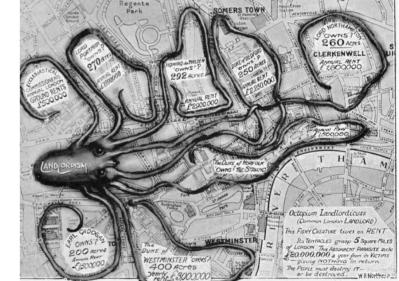
It is a conversation that has been growing within the field of architecture over the past few years, and was especially bought to focus with the 2019 Oslo Architecture Triennial, *Enough. The Architecture of Degrowth* which, 'looked for urban and architectural solutions for a future where human and ecological well-being are prioritised over economic growth.'² The festival saw the collaboration of architects, artists and economist amongst others to pose potential new futures – ones which are multidisciplinary in their solutions.

This diploma project seeks to ask the same questions. What would the architectural outcomes for this look like of a degrowth economic system? How would this impact the building process and materiality of a home? What would it mean for the shared spaces of our communities in our neighbourhoods if we place less emphasis on ownership? <u>Could craft become a value instead?</u>



Right: The concept of value embedded in property, with the Landlord Octopus sucking the lifeblood from the people, postcard published by WR Northrop in 192. Image Source: Architectural Review

Brixtonbuzz



1. Bilbao, T. (2018) A House Is Not Just

A House: Projects on

Housing.

<u>New Lifestyles,</u> <u>New Paradigms of Work</u>

<u>COVID-19</u>

This past years has seen unprecedented collective changes in the way we live. COVID-19 has accelerated new paradigms of work, making the office redundant overnight and the home now becoming both the space for working and living, often also the school and the gym.

The architecture of the domestic space is fundamental to both shaping our lives, and our cities. This shift in the way we behave within our homes will have an impact on the homes surrounding environment, our actions inside have a relationship with the outside, the change in our behaviours also impacting our communities. Can it be considered the architects responsibility to design the relationship between the private and the public spaces of our domestic environments, to build sustainable communities?

1. TimeOut London (2021) Where did everyone go? London's population is officially Falling.

London Exodus

We no longer need to live in the city, and many are leaving. The population of London shrunk this year for the first time since 1988¹, and with them they are distributing the once centralised wealth around the country. This will have spatial implications, the traditional hierarchical relationship between the urban and rural environments in our society will shift. Furthermore, the displaced population will need somewhere to live, if everyone is moving to the countryside how is the countryside going to develop to accommodate?

Average earnings of London vs the rest of England

Fig (4) Average takehome earnings. (earnings are what is left of your income once taxes and benefits are taken into account.) **Imagine the benefits of this becoming more equal**. Diagram credit: author. Source: ONS, 2016.

London boroughs	
£18,573 £27,179	£62,600
England without London	
£12,232 £18,506 £29,325	
Cornwall	
£17,018	

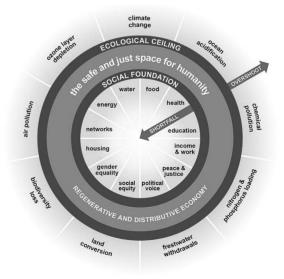
Equality

The paradigm of work, leisure and rest acting out in separate locations in our urban environment was birthed in the industrial revolution (along with our contemporary economy). The economic model we follow is often discriminatory not taking into account different types of work when calculating economic value, and therefore not rewarding many people for their labour. The concept of our modern domestic home is built of these values: separate spaces are purposely designed for cooking, cleaning, looking after the children – all traditionally women's work– to spaces of leisure and rest. How can we redesign domestic spaces to create a more equal home?²

2. Bilbao, T. (2021) The House As A Social Act, Lecture.

By designing the home to be more accommodating we would also be designing a home that is flexible by nature, a space which functions could change over time as the needs of its inhabitants change. Therefore, we would be designing more sustainable homes, which critical when designing within the context of the climate crisis.

In summary new lifestyles accelerated by COVID-19 will change the built environment at the architectural scale by shifting the functions of the home the domestic home from primarily private to public. Whilst at the urban scale the redistribution of people away from our cities will see <u>a need for new infrastructure as well as housing</u>. It is the architects responsibility to see that this is designed equally and sustainably.



The *Doughnut Economic Model* is a visual framework for sustainable development combining the concept of planetary boundaries with the complementary concept of social boundaries. It was proposed to regard the performance of an economy by the extent to which the needs of people are met without overshooting Earth's ecological ceiling. Credit: Kate Raworth.

Standardisation of Architectural Practice

As I discussed in my written thesis *Craft Craft Craft. Good Design For Everyday People: A Case For Crafting Housing* the standardisation of architectural practice — from how we draw buildings, to standard processes of construction and preferred supply chains — have a direct impact on the quality of contemporary "volume" houses.

This is not just a contemporary phenomenon, the standardisation of housebuilding on mass has been occurring since the Industrial Revolution in the UK when the concept of the pattern book was introduced. This is actually what the government looks back to when setting its new standards in the planning reforms:

Within the practice of housebuilding there has to be a certain degree of standardisation to create efficiency and control costs — it is not logical to give every single house a unique design. Volumes of housing have been historically built in the UK following the concept of pattern books, an architect would provide a catalogue of design principles for a housing developer to follow when building rows of terrace houses. The pattern books would include everything from the sizes of rooms, material choices and detailing, down to decorative ornaments. By following the patterns the developer knew what the final outcome of the house would be and knew that this guaranteed quality and desirability in the finished living spaces, so he knew he would be able to sell the houses and make a profit. It is the basis of the typical character of housing in English towns and cities, which is why the UK Governments Building Better Building Beautiful commission has hailed the resurgence of the pattern book as the solution for "future placemaking" which is set out in The White Paper to become the basis of the earlier mentioned current planning reform in England.¹

1. Author (2021) Craft Craft Craft P. 25

2. Nissanke, H. (2021)

Real Estate, Lecture.

Furthermore, the standardisation of how we measure space has had a lasting impact on the design of space. The universality in today's measurements and methods are both equally enabling and limiting of progression of design.² The way we measure is key to how we attribute value to something, so in order to create a new value system (as discussed in *The Case For Degrwoth Economy* section) we should also be critical of the units from which we create.

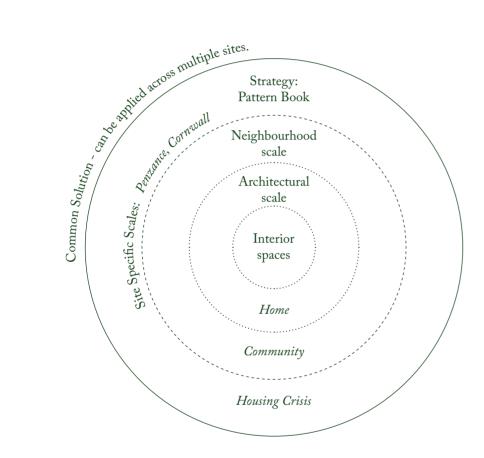
This project will seek to develop new standards for housing, that deliver high quality architecture to everyday people.

Marcel Duchamp's experiment in representation of standard units of measurement, *3 Standard Stoppages*. Image source: Tate Galleries.





L: McGrath Road, London, UK. Peter Barber Architects, R: Goldsmith Street, Norwich, UK. Mikhail Riches - both are contemporary examples of designing with pattern book principles. Image source: Peter Barber Architects, Mikhail Riches



2. The Design Task <u>A new strategy for housing policy</u>

Complex Layers

The ongoing housing crisis in the UK is too large and complex, the problems and their areas too diverse to fix with a single over-arching solution, so this project will not try to do so. Instead it will seek to propose a strategic approach to developing a new model of volume housebuilding, made up of smaller interventions that can added together and be scaled up to provide appropriate solutions.

<u>Pattern Book - Design Strategy</u> (Scalable to multiple locations across UK)

I wish to work within the constraints laid out with the proposed new planning reforms in England, seeking to develop a design guide to housing in the form of a 'Pattern Book'. This will consider the different scales of a housing development: from a neighbourhood scale considering new housing areas infrastructure and civic spaces, through to an architectural scale of a house, and the building components of this. <u>It will be important to consider the question of craft at each scale developed</u>.

The pattern book will set out new agendas for housebuilding with new values based on community making, support of local economies, and providing high quality homes to achieve a long-term sustainable economic model.

It is important to me that this project develops an optimistic solution that is based in reality; one that acknowledges that the social and spatial is vastly different in different parts of the country. Furthermore, the solutions developed should be able to be adapted by local communities to solve the problems they know they need to fix.

<u>Architectural Proposals - Neighbourhood & Architectural Scale</u> (Site specific: Penzance, Cornwall)

I will then take these design principles laid out in the pattern book and apply them to a specific site. Demonstrating how the general strategies can be adapted to a specific area integrating the local characters and crafts, whilst solving the more specific problematics of housing crisis in that region.

The principal scale of the project will be that of the architectural sale; asking how can architects as a profession get craft back into volume housing and provide architectural quality (both spatially and materially) whilst still building the quantity of housing required.

Fig 2: Symbiosis of scales in the project from the general strategic scale of proposed housing policy to the personal architectural scale of the interior spaces of the home. Due to the nature of the complexity of this project all layers need each-other. Credit: author

<u>3. Site</u> Cornwall

Home as a feeling

One of the biggest critiques of the 'shoebox housing' is that it does not matter where you are in the country developers are building dwellings that look the same, there is no visible local character to the architecture and therefore a lost sense of belonging. So it is important that the architectural proposals explored in this diploma project are to embed themselves in their site, to explore a notion of belonging and a notion of home.

The chosen site, Cornwall, South-West England, is my home. Despite having moved away as a kid it is still the place where I feel a deep sense of belonging when I go back.

This feeling of belonging is inspiration for many of Cornwall's famous art buy artists such as Barbara Hepworth, Alfred Wallis and Virginia Woolf.



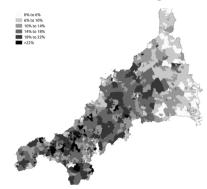
Coastline somewhere between St.Ives & St.Just. Photo taken by author. (2018)



England "Up Country" Southwest (West Country) • London Cornwall Penzance

Local Identity (Politics)

Known for its natural beauty, the Cornish peninsular is wrapped in over 300 miles of rugged coastline which is home to many fishing harbours, and it's green hills support a dairy industry famous for clotted cream. The culture is rich with fishermen's tales and sea shanties passed from generation to generation that are still sung down the pubs today, and legends of giants and saints (which, I can tell you from first hand experience, are taught in schools like the Bible is).



The percentage of people who gave "Cornish" as an

answer to the National

Identity question in the

set up as a publicity stunt

by the Cornish tourism

board. Note: it increase

the further west you go.

Source: Wikipedia

2011 census - this was

Independence

For such a small and remote place Cornwall has a phenomenal identity; the Cornish are incredibly proud of where they come from. There has long been a contested debate on independence for Cornwall, a result of a sense of 'them' and 'us' in the region with the rest of Britain (fondly referred to as 'up-country'). This question of identity is incredibly politically charged. To many 'Cornish' is an identity, an identity which is used by the tourism industry to real-in the punters.

EU Protected Status

In 2014 Cornish people were granted minority status European Framework Convention for the Protection of National Minorities; their this identity was recognised and cultural exports (notably Cornish pasties) protected.

<u>Flag</u>

The black and white flag tells the legend of the discovery of tin smelting by St Peran (who threw a rock into a fire that then started to leak a white liquid, tin) demonstrating the importance and pride of local industry to the region.



The "Cornish" section of a supermarket in Penzance, displaying (L to R) beer, fudge, tea, and cider. Photo taken by author in 2018

Local Economy: Decline of Industry + The Rise of Tourism

With the decline of its industries, mining and now fishing as a result of Brexit negotiations, the region now heavily relies on its tourism industry. This reliance is a true love hate relationship, tourism is considered to be destroying many communities creating ghost towns of second homes, pushing house prices up and placing incredible strain on old local infrastructure. Yet the people simply cannot live in Cornwall without it. This lack of a local prospects is forcing young people to 'up county' to find jobs.¹

3. Site



An old mineral mine near Camborne, northeast of Penzance. Source: Cornish Heritage.

Assembles Granby Workshop gives agency to locals. Granby Four Streets. Credit: Assemble Studio

The area needs a new stable economy, one that will provide long term prospects for local people. There are two current contenders for this in the development of this project, the first being the introduction of a knowledge economy as a result of people moving away from London as discussed in the 'New Paradigms of Work' section of this program, the second being the introduction of the craft of housebuilding as an industry and exploring what this would look like in contemporary architectural practice (an example of which could be The Granby Four Streets project by Assemble). The direction this takes will decided in the design process of the project.



Fishing was a key point in the Brexit talks. 92% of fishermen voted leave, now many feel like they were used as pawns in the negations as they have both lost control of the water, and trade to the EU. The photograph is of the Fishing For Leave (FFL) Battle of the Thames, 15th June 2016 the week before the Brexit vote. Opposing sides were lead by Bob Geldof and Nigel Farage, both on boats. Credit: Ben Stansall

Current Housing Problematics

Affordability

1. Davis, C. (2021) People, Poverty, Power. The author and campaigner Catrina Davis explains the housing crisis in Cornwall as, <u>'an affordability crisis. There are plenty of empty</u> <u>houses, it's just that nobody can afford to live in them.</u>^{'1} identifying that it is a problem that is intertwined factors such as the local economy, employment opportunities, and the second home market.

Empty Properties

2. Author. (2017) Airbnb: How Is The Sharing Economy Changing The Domestic Home? Cornwall has the most empty homes of any region in the UK (fig 5). What makes Cornwall different to other regions is that this is a largely seasonal with properties marketed as holiday lets in the summer, and then moving to the private market in the off-season. This is problem both because it prevents locals from having long term stable places to live, and creates inflated rental prices due to the "Airbnb phenomenon".²

As with the rest of the country there is a need for new housing in the region, which would require some new builds but could have a more intelligent solution with using the existing housing stock.

Diversity

It is important to note that these problems should not be generalised for the whole of the region, and that different towns and villages have different qualities that create a different set of challenges in regards to the housing crisis. As explained by Jon Lloyd-Owen , service director for housing at Cornwall Council. 'There's a danger with county-wide generalisations that it risks missing the point, as you get a huge amount of variation within Cornwall. The coastal areas have got a significant second home and holiday market and the impact that has on house prices and the rental market is considerable. There, wages don't flex similarly so affordability issues can be extremely acute. So it's a varied picture across the Duchy.'³ The town of St. Ives became the first place to ban the sale of second homes in 2016, with the aim to solve it's housing crisis. A report by LSE in 2019 said the ban had backfired as developers no longer want to build in the area due to inflated land costs and the resulting lost ability to sell property at a profit, so the ban is viewed as a failure. It is not as idyllic as it looks. Image source: The Guardian



The number of homes unoccupied on 5th October 2020

13,642 are second homes = 73% Cornwall 18,621 Camden 12,187 11,946 Birmingham Kensington & Chelsea 11,491 Leeds 10,934 10,447 Tower Hamlet 9,003 Manchester 8,884 Bournemouth Bradford 8,783 Liverpool 8,563

Fig (6) English regions with highest number of empty houses. The number of empty houses proportionate to population in Cornwall is around three times as many compared to urban Birmingham and Leeds. Credit: author. Source: Structural Repairs via Cornwall Live.

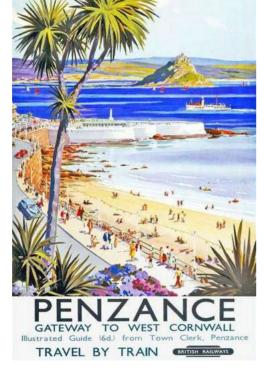
3. Site

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Above: Directions to drive from Westminster, London to Penzance. The fastest route is 5hr 7 min, without summer traffic. Source: Google maps.

Right: A travel guide for Penzance. The illustration shows the promenade and lido in the foreground with St. Michael's Mount in the distance. There are also palms which are common in Cornwall due to the warm(er) climate. Source: Vintage Railway Posters



Site: Penzance

See Figure (7) on next page for a map. Penzance is the most westerly town in England. Newlyn just to the East is considered a part of Penzance and has Cornwall's largest fishing port, as well as being a famous destination for artists.

Beyond the holidaymakers away from the beaches with the surf and second homes are struggling communities enveloped in the dark shadow of austerity. The mean gross annual salary in Penzance was £26,788 in 2015, compared to £34,365 in England as a whole. In 2017 Cornwall had the tenth highest numbers of people sleeping rough in the country and the third highest suicide rate. Cornwall is the only county poor enough to qualify for EU emergency funding for poverty, and has an average wage of 17% below the rest of the country. Penzance's location at 'the end of the line' is often started as the reason why there is a high number of rough sleepers in the area – there is nowhere further to possibly go.¹

1. Ash, L (2020) Dark, Salt, Clear P.4

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The town illustrates all of the points previously made in the description of Cornwall: there is a need for both new housing and introduction of industry to provide a long-term stable economy for local residents, whilst there is a need to accommodate people form 'up-country' both as a result of tourism and the displacement of people from cities to the countryside as a result of new paradigms of work.

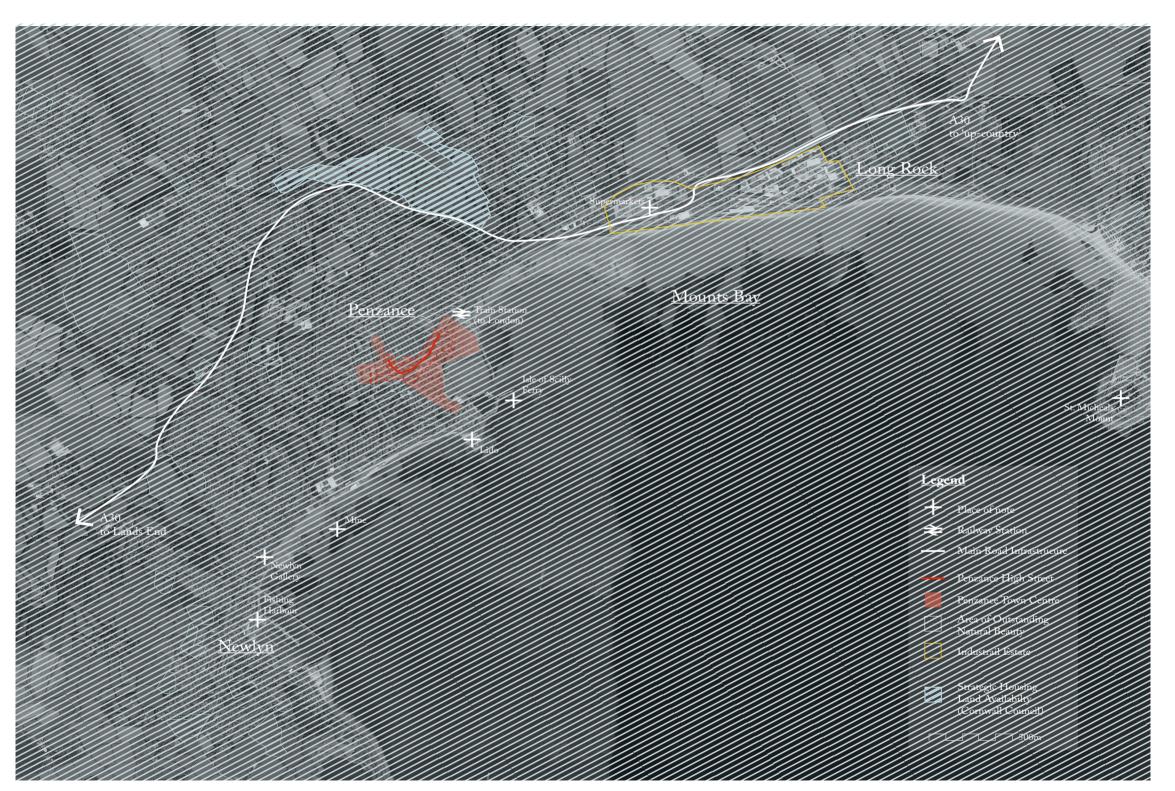
Existing rail and road infrastructure already links Penzance to London, allowing for a flow of goods and people, making it ripe for development. The town has great potential to become an example of a new model of housing.

The exact site for the development of the project will be determined through further testing of potential programmatics (either adaptation on new build) during the design process in response to the previously discussed planning reforms.

As it is unlikely that I will be able to go and visit the site in the time-frame of the diploma due to COVID-19 restrictions I will seek a connection through talking to local housing campaigners including Catrina Davis author of Homesick: Why I Live In A Shed, as well as drawing upon my own personal connections to Cornwall. Lamorna Ash's book is a beautiful description of the realities of contemporary life in Newlyn. It gives a real sense of the strong community, its culture, and the complexity of the difficulties the fishing industry faces. Image: Dark, Salt, Clear cover. Source: Bloomsbury Publishing



Craft As Standard



Fig(7): Site Analysis. The town of Penzance with neighbouring fishing town Newlyn situated on Mounts Bay in southwest Cornwall. Credit: Author. Source: Cornwall Country Council

Precedent study: Nansleden, Newquay

Described on The Princes Foundation website as, 'On the north coast of Cornwall you'll find Newquay, a bohemian coastal town fêted by surfers and students alike for its expansive beaches and plethora of bars. Yet even the most beautiful of areas can suffer from deprivation, and such is the case here. To remedy this and to help strengthen the local economy, Cornwall Council commissioned The Prince's Foundation to create a 540-acre urban extension to Newquay, called Nansledan, which is owned by the Duchy of Cornwall.'¹

It is a mixed function development with planning permission grated for 800 homes, a high street with local shops, offices, a Methodist church, recreation field, orchard, allotments, an estate yard and an urban farm. An example of how new housing should be developed with supporting infrastructure.

The scheme has been developed using the pattern book approach with design guides set up for materials and building process ensuring use of local craft, and vernacular.

Newquay Growth Area Pattern Book Credit: Cornwall Council

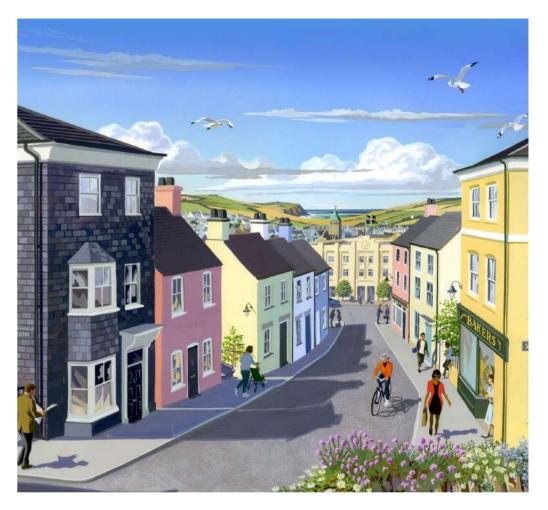
1. The Princes Foundation. Welcome

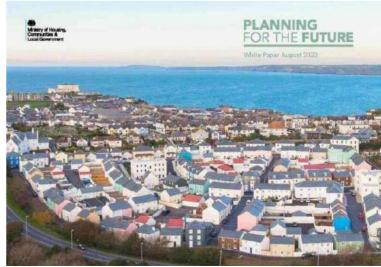
Thriving Sibling

to Nanselden, Newquays



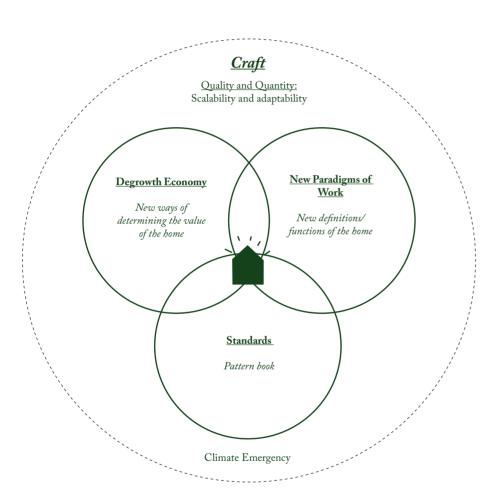
It is a strong example of how new housing areas can be developed to meet the needs of local people, and built using local means - but it is important to note that it has been built on land owned by the Duchy (so Prince Charles, who is also head of Princes Foundation who were the developers of this project). Therefore, the usual problems such as the price of land were not an issue here. <u>I would like to take the points that have worked well here, the precedent of the pattern book and the incorporation of craft, and explore how this can become more community lead, to give more agency to local people, and new models of ownership.</u>





Above: Promotional material for the development in the style of old railway tourism posters. Credit: Duchy of Cornwall

Left. The development made the front cover of the 'Planning for the future' August 2020 Housing White Paper -The paper that proposed the 'Build Build Build' planning reforms . Image source: UK Government



<u>4. Program</u>

Design Parameters

The Design proposals in this project will situate themselves in-between all of the design parameters (fig 1) discussed in the *Societal Thematic* section: <u>degrowth economy</u>, <u>new paradigms</u> of work, and standardisation of architectural practice. Whilst considering the larger thematics of craft, the scalable application of the proposals, and (last but not least) the climate emergency.

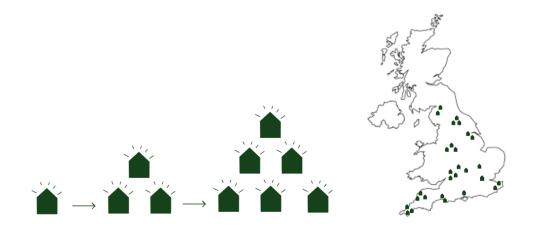
4. Program

Modular Design

The design has to able adaptable to be built in different places around England. Should be both a common solution to the nationwide affordable housing crisis, and maintain personal and local characteristics of 'home'.

Quality and Quantity

The proposal needs to be able to be scaled up and down to suit the needs of its site without losing its architectural quality



Left, Fig (8): considered modular design, proposals must retain their quality when built at scale Right, Fig (9): housing strategy must be adaptable to be built in different areas of the UK, each with differer cultures and conditions. Both diagrams credit: author

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Fig 1: Design parameters for the design of the new model of affordable housing. Credit: author

Iconography for representation



<u>Scale</u>		<u>Design Task</u>
Strategy	\longrightarrow	Pattern book
Neighbourhood scale 1:1000/ 500	\longrightarrow	Civic infrastructure & community processes
Architectural scale 1:100 - 1:10	\longrightarrow	The home: spacial and material qualities, detail components

The design proposals developed at the neighbourhood and architectural scales will explore the principles of the developed pattern book in the specific site of Penzance, Cornwall.

The project shall seek to look beyond the standard representations of architecture to explore how best to engage local people with their architecture – with a particular focus on communicating through models.

UN Goals

This diploma project will address the following UN Sustainable Development Goals:-

Goal 1: No poverty Goal 8: Decent work and economic growth Goal 11: Sustainable cities and communities Goal 12: Responsible consumption and production









Granby Four Streets, drawings and model, Assemble, Marie Jacotey St Ives School artist and their depictions of domestic life in Cornwall: *The Hold House Port Mear Square Island Port Mear Beach*, and *St Ives* both by Alfred Wallis. *Bedroom, Mousehole*, Patrick Heron. *Still Life*, William Scott.

<u>4. Coda</u>

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8. Considered modular design, proposals must retain their quality when built at scale

9. Housing strategy must be adaptable to be built in different areas of the UK, each with differer cultures and conditions.

<u>CV</u>

Professional Experience

Danielsen Architecture Copenhagen Model Maker	2019-20
Studio C102 Architecture & Design London Part I Architectural Assistant	2017-19
Stiff + Trevillion London Intern	2017
Education	
The Royal Danish Academy Copenhagen MA in Architecture Urbanism and Societal Change	2019-
University of Westminster London Architecture BA(Hons) - RIBA Part I Assemble Studio, Anthony Angi Meacock & Giles Smith	2014-17
Cirencester College Gloucestershire, UK A Levels: 3D Design, Physics, Mathematics with Further Mathematics	2012-14
Other Relevant Experience	
RIBA Mentoring Scheme Studio McLeod	2016-17
References	
Kyriakso Katsaros Director: Studio C102 Architecture & Design	
Giles Smith Tutor: University of Westminster, Partner: Assemble	
Christine Bjerke Tutor: The Royal Danish Academy	

