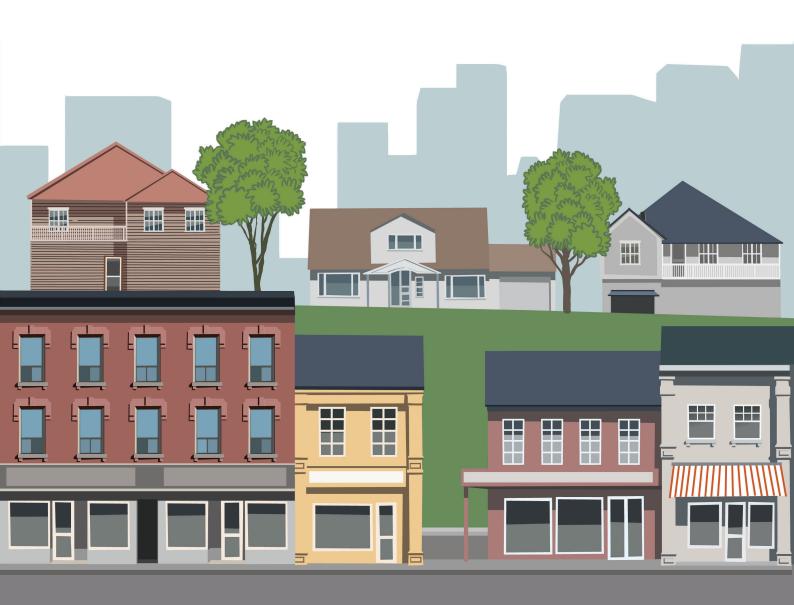
Building Beautiful



A collection of essays on the design, style and economics of the built environment

Edited by Jack Airey

Foreword by Kit Malthouse MP



Building Beautiful

A collection of essays on the design, style and economics of the built environment

Edited by Jack Airey
Foreword by Kit Malthouse MP



Policy Exchange is the UK's leading think tank. We are an independent, non-partisan educational charity whose mission is to develop and promote new policy ideas that will deliver better public services, a stronger society and a more dynamic economy.

Policy Exchange is committed to an evidence-based approach to policy development and retains copyright and full editorial control over all its written research. We work in partnership with academics and other experts and commission major studies involving thorough empirical research of alternative policy outcomes. We believe that the policy experience of other countries offers important lessons for government in the UK. We also believe that government has much to learn from business and the voluntary sector.

Registered charity no: 1096300.

Trustees

Diana Berry, Pamela Dow, Alexander Downer, Andrew Feldman, Candida Gertler, Patricia Hodgson, Greta Jones, Edward Lee, Charlotte Metcalf, Roger Orf, Andrew Roberts, George Robinson, Robert Rosenkranz, Peter Wall, Nigel Wright.

About the authors

Prof. Robert Adam is an architect with 40 years in practice and a director of ADAM Architecture, the largest UK firm specialising in traditional design.

Marwa Al-Sabouni is a Syrian practising architect and author. Her book The Buttle for Home explores the relationships between architecture, social cohesion and the Syrian conflict.

Robin Ballance is an architectural designer. His late partner, Colin Amery, was a pre-eminent architectural historian who sadly died in August 2018. Policy Exchange hosted the inaugural Colin Amery Memorial Lecture in November 2018.

Ben Bolgar is a qualified architect and Senior Director at The Prince's Foundation. His 25 years of experience has seen him work on brownfield remediation, city expansions, town centre regenerations and more.

Martin Boon is a polling expert. In 2018 he co-founded Deltapoll and before that he was the Director of ICM.

Nicholas Boys Smith is the Director of Create Streets and the author of studies into the links between urban form and design with wellbeing, value and public support.

Bruce Buckland is the Director & Principal Architect at Buckland Architects. He is also a former BIM Manager.

Jon Cruddas is the Labour MP for Dagenham and Rainham, and former Policy Co-ordinator of the Labour Party.

Ben Derbyshire is President of the Royal Institute of British Architects (RIBA). He is also Chair at HTA Design, a design consultancy.

Richard Ehrman is a writer and a property developer. Richard was a member of the expert panel that advised Sir Oliver Letwin on his review of build out rates in housebuilding.

Sir Terry Farrell is an architect and Principal of Farrells. In 2014 he produced a Review of Architecture and the Built Environment for the DCMS.

Zac Goldsmith is the Conservative MP for Richmond Park, and formerly the Conservative Mayoral Candidate for Greater London.

Will Heaven is the Director of Policy at Policy Exchange. He was previously Managing Editor of The Spectator.

Dr Maddalena Iovene is an Urban Designer and Researcher at Create Streets.

Roger Madelin CBE is Head of the Canada Water Development at British Land. Before that he worked at Argent LLP where he helped to deliver the King's Cross Central and Brindleyplace developments.

Kit Malthouse MP is the Housing Minister and Conservative MP for North West Hampshire.

Julia Mizen is the Managing Director of Policy Exchange. She has previously worked as a landscape designer on projects ranging from soft landscaping schemes for Canary Wharf to two medal winning gardens at RHS Chelsea Flower Show.

Prof. Andy Neely is the Director of the Centre for Digital Built Britain, a partnership between BEIS and Cambridge University delivering a digital economy to modernise infrastructure and construction.

Dr. Demetri Porphyrios is an architect and the founding principal of Porphyrios Associates. He has an international reputation for excellence in traditional architecture and urban design and he was the masterplanner for the King's Cross Central development in London.

Dame Fiona Reynolds is Master, Emmanuel College Cambridge and former Director-General of the National Trust. Her book The Fight for Beauty is available from Oneworld; follow her on twitter @fionacreynolds.

Sir Roger Scruton is a philosopher and writer. He is chairing Government's Building Better, Building Beautiful Commission.

Francis Terry is a classical architect and the Director of Francis Terry and Associates Ltd.

© Policy Exchange 2019

Published by

Policy Exchange, 8 - 10 Great George Street, Westminster, London SW1P 3AE

www.policyexchange.org.uk

ISBN: 978-1-910812-64-8

Contents

About the authors	Z
Foreword y Kit Malthouse MP	6
Introduction y Jack Airey	7
Is the fight for beauty a fight against ugliness? y Dame Fiona Reynolds	10
The economics of building beautiful y Richard Ehrman	14
How to create beautiful social housing y Zac Goldsmith MP	19
i How to build homes, not just houses y Marwa Al-Sabouni	25
The need for beauty y Sir Roger Scruton	30
' Let us build popular mansion blocks y Sir Terry Farrell	36
B Should architects care what the public think? y Ben Derbyshire	43
What explains the 'design disconnect' between most people and professionals? y Nicholas Boys Smith	49
0 Green and beautiful: the spaces in between y Julia Mizen	53
1 Architecture and the public good y Dr Demetri Porphyrios	60

12 Beauty and a romantic left by Jon Cruddas MP	63
13 Building beautiful: how much a priority is this for developers? by Roger Madelin CBE	68
14 What do people like about old architectural styles and how can the be incorporated into contemporary designs? by Bruce Buckland	74
15 Can beautiful homes be built in a factory? by Francis Terry	80
16 If we want beautiful places, let us define what they are by Ben Bolgar	85
17 Who is to blame for the failure of buildings? by Robin Ballance	90
18 Do we get the public realm we deserve? by Maddalena Iovene and Nicholas Boys Smith	95
19 Can good design survive the planning process? by Professor Robert Adam	101
20 Can AR and VR allow us to build beautiful? by Professor Andy Neely	107
21 What building beautiful can do for mental health by Will Heaven	112
22 What is popular design and style? by Martin Boon	118

Foreword

by Kit Malthouse MP, Minister of State for Housing and Planning

My biggest challenge by far as Housing Minister will be convincing the British people that the land needed to solve the national housing crisis lies in their suburbs, villages, cities and towns. The numbers are daunting: my target of building 300,000 homes a year means approximately one million under construction and something over four million in the planning system. The only way we stand a chance of winning their support for this output is if they like what we build — beautiful buildings gather support; blank ubiquity garners protest and resentment. If you get the design right, the scale, the context, the fitness, communities will feel enhanced and respected and will lay down their petitions and placards.

This is why we've started a debate on quality and design with the launch of our Building Better, Building Beautiful Commission and why I welcome this fascinating publication from Policy Exchange.

Beauty may well be in the eye of the beholder but taste, what the public likes, is more objectively measurable. And it is surely the taste, not only of the occupants of new homes, but of those who live near them, and have to accept them, to which we should pay more attention. Our new commission will urge developers to make room for beauty and to let architects rip, for only they can save us from the blankness.

If there is one thing I achieve as Housing Minister I want it to be that articulation, detailing, proportion and vernacular become words used in the design of mass domestic architecture once again, for they are largely absent now. We must all surely aspire to build the conservation areas of the future, and I am convinced that unless we do, we will not receive the cooperation of the public in our urgent moral mission of building the homes the next generation deserves.

In 1928 Xu Zhi Mo, the Chinese poet was so awestruck by its beauty, and bereft at leaving the city, that he wrote the seminal poem On Leaving Cambridge. Since then millions of Chinese citizens have dreamed of the Cam and multitudes have visited, searching for an aesthetic that reaches across cultures and speaks to everyone. The questions we must now ask and answer are whether we are building anything today that would offer similar inspiration and if not, how can we do so again? This collection of essays makes a great start on finding those answers.

1 Introduction

by Jack Airey

In November, the Government announced a new commission on Building Better, Building Beautiful. The Commission will consider a range of issues to do with the built environment, from design and style to community consent, but it has one central theme: how to find ways to raise the standard of new homes and places across the country. Although the Commission has provoked a great deal of discussion in the media, the architectural profession and in Parliament, the thing that has unified almost all responses to the Commission has been its necessity. It seems we can all agree that not enough new homes and places are built in ways that people find beautiful.

We are publishing this collection of essays as a way of offering ideas to the Government's Commission. The collection includes contributions from across politics, architecture and the housebuilding industry. Not every topic is covered and not every point of view is represented – there are too many of both to fit into one collection – but we hope our contribution is informative and useful.

It is essential that the Commission does not fall into a trap of debating one architectural tradition over another. The focus must be on what the public find beautiful in buildings and places — whether that is related to style, construction materials, craftsmanship, workmanship, the amount of space and light, interior design, the street, the public realm, spaces between buildings or something else — and finding ways for new developments to meet those standards, whether that is through changes to the planning process, a different targeting of government subsidy or by supporting innovations that can reduce the costs of land and construction.

The sad truth is it is easy to build new homes and places that are ugly and too difficult to build ones that are beautiful. This fuels Nimbyism and is a real barrier to building more homes in the parts of the country where they are needed. In that respect, the Commission will have much to consider. As we hope this essay collection shows, there is much the Government and the wider housebuilding industry can do to 'build beautiful'.

In the collection's opening essay, Dame Fiona Reynolds, a former Director-General of the National Trust, argues that the fight for beauty is not only a fight against ugliness, but also against ubiquity and mediocrity. She concludes that, "Perhaps the greatest opportunity for our society today is whether we can beautifully remodel our cities, towns and suburbs to create sustainable, mixed, vibrant communities that are not only beautiful to look at, but beautiful – and sustainable – to live in."

Next, Richard Ehrman, a writer and property developer, argues that the key to better quality and design in new housebuilding lies in the developers'

raw material – land. He argues that, "When it comes to encouraging better quality, the incentives are all facing the wrong way." To improve the quality of housing development Richard argues that either land has to become cheaper or the state should intervene to capture much more of the uplift that occurs when land gets planning permission.

Zac Goldsmith, Conservative MP for Richmond Park, argues that estate regeneration is one of the most vital issues that the Building Better, Building Beautiful Commission can tackle. He says it can create places that are more beautiful and community-minded for social housing tenants across London.

Marwa Al-Sabouni, Syrian architect and author, writes about the destruction of Syrian cities over the past century. She argues that architecture and the built environment have played an important role in the widespread "loss of home" across the country.

Sir Roger Scruton, a philosopher who is chairing the Government's Building Better, Building Beautiful Commission writes why we need beauty in our lives – and the factors that make buildings and places welcoming or alienating.

Sir Terry Farrell, an architect, writes that London needs a renaissance in mansion block building — but that building guidelines on light availability prevent that from happening. He argues those guidelines should be redrafted.

Ben Derbyshire, President of the Royal British Institute of Architects (RIBA), argues architects and the housebuilding industry more widely should engage with the public much more. He suggests greater care and concern for design is required if more homes are to be built in ways the public like.

Nicholas Boys Smith, Director of Create Streets, writes that when it comes to the design and style of new buildings, there is a big difference between the preferences of the public and design professionals like architects and planners. He argues that, "It is hard to conclude that the current system is under effective democratic control."

Julia Mizen, Managing Director of Policy Exchange and former landscape gardener, argues that green spaces are vital to the success of urban regeneration schemes and new town developments. In her essay she writes that, "nowhere is the need for beauty and good design more important than in the communal outdoor spaces which link our streets and estates in built up areas."

Dr. Demetri Porphyrios, an architect, describes what he believes makes a human city – outlining the need for common proportion and measure, whatever the architectural style. He argues that to build more human cities, "It is time that we defend practical reason and beauty against the domination of universal technique."

Jon Cruddas, Labour MP for Dagenham and Rainham, recalls that caring for beauty in the built environment is a great tradition of the Left. He argues that, "As politics has become increasingly instrumental and economistic, it might help us retrieve a language around what it is to live a good life."

Roger Madelin CBE, who has steered the redevelopment of King's Cross

in London, Brindleyplace in Birmingham and now Canada Water, writes on 'building beautiful' from the point of view of the developer.

Bruce Buckland, an architect, argues that architecture should be seen more as a science than an art. His essay deconstructs some of the reasons why the public have an apparent preference for old architectural styles.

Francis Terry, an architect, suggests that as more homes are built in factories instead of on building sites, it is important to build them in ways that people find beautiful. He argues that, "Traditionalists should have no fear because prefabrication has been with us since classical times."

Ben Bolgar, a Senior Director at The Prince's Foundation, argues there are a number of things that are critical to building the sorts of places local people find beautiful – instead of building homogenous housing estates. He recommends a definition is made for what a beautiful place looks like so that planners, developers and architects have something to refer to.

Robin Ballance, an architectural designer and partner of the late pre-eminent architectural historian Colin Amery, writes about the redevelopment of one of Colin's least loved areas: Victoria Street in London. He says the street is an example of how not to 'get it right' and says that rather than blame architects for the failure of buildings, "Maybe the finger should point to planning officers and possibly those who commissioned the building in the first place."

Dr. Maddalena Iovene, an Urban Designer and Researcher at Create Streets, and Nicholas Boys Smith suggest some rules for creating places people actually want to enjoy. They argue we need to move democracy in the planning system upstream from the development control-process to the plan-setting process.

Prof. Robert Adam, a major figure in the development of traditional and classical architecture, writes about the process a design vision takes through the planning system. He argues "this process has become so burdensome that it not only acts as a severe brake on the delivery of housing but is so arbitrary and fragmented that the chances of a design vision surviving become very slim indeed."

Prof. Andy Neely, Director of the Centre for Digital Built Britain, considers the enabling role technology could play in the planning system and how data is changing the construction industry. He argues Virtual Reality and Augmented Reality features mean we can now experience the sense of a place before a brick has even been laid. This could revive the planning process by allowing much greater public participation.

Will Heaven, Director of Policy at Policy Exchange, considers the academic evidence linking the built environment with mental health. He writes that buildings can change our moods and affect our mental health.

Finally, Martin Boon, a polling expert, outlines public opinion on what makes a home and a place beautiful. Using the output of focus groups and polling results prepared for Policy Exchange by Deltapoll, he finds there are many components to beauty – from a home's façade to the greenery of a place – and that too often the public think these are missing in new housing developments.

2 Is the fight for beauty a fight against ugliness?

by Dame Fiona Reynolds

Beauty is a word that stirs our emotions. It's one we all use, confidently, when we talk about a beautiful landscape, building, bird or butterfly. But it can also feel divisive and awkward, especially when it comes to public policy. So much so that in recent decades it has virtually disappeared from our official language. Even politicians admit this, some with regret: Oliver Letwin said, "I believe that the disappearance of beauty from the vocabulary of politics is one of the reasons why British politics today so frequently strikes people as desiccated. I believe it is one of the reasons why so many people are 'turned off' politics."

There are too many examples to count where the word beauty and the subjective, human judgements associated with it have disappeared. We seem to have accepted that the only things that matter are the things we can measure. So in almost every debate about protecting the countryside, nature or historic buildings "emotional" words like beauty have been replaced with bureaucratic alternatives that attempt a more objective analysis: natural capital, ecosystem services, heritage value or biodiversity. Gone is the heartfelt, spiritual uplift that comes from experiencing something or some place that is, simply, beautiful.

It wasn't always like this. In the 1940s, drawing on the inspiration of Burke's essay on *Ideas* of the Sublime and Beautiful; Gilpin's evocative descriptions of travelling in the Lakes and the Wye Valley; and encouraged by the enticing prose of the Romantic poets, the word beauty was enshrined in legislation to protect our most valued landscapes: National Parks and Areas of Outstanding Natural Beauty. In the 1960s the Countryside Commission was charged with "the conservation and enhancement of the natural beauty and amenity of the countryside"; though by 2006, when its successor Natural England was created, this duty had become just "conserving and enhancing the landscape".

But alongside the recognition that beauty needed to be protected was equal clarity that it was under siege. In 1926 the "modern ugliness" of concrete replacing stone, barbed wire substituting for hedges and stone walls, conifers rather than beech or oak, bungalows and red brick villas rather than houses of local stone and electric power poles that "scrape the sky" caused the Regius Professor of History at Cambridge University G M Trevelyan to publish a pamphlet called, rhetorically no doubt, Must England's Beauty Perish?

In 1955 Ian Nairn wrote Outrage, a special edition of the Architectural Review, in which he railed against subtopia: "a mean and middle state,

neither town nor country, an even spread of abandoned aerodromes and fake rusticity, wire fences, traffic roundabouts, gratuitous notice-boards, car parks and Things in Fields... a world of universal low density mess."



Hollingbury, Brighton – an example of the 'subtopia' against which Ian Nairn railed. Credit: Dominic Alves, Flickr (Creative Commons).

So yes, the fight for beauty is indeed a fight against ugliness. And it's been going on as long as the human appetite for economic progress has been stronger than our sensibility to what matters but money can't buy. The drowning of Thirlmere (which launched the campaign to protect the Lake District), the clothing of the hills in Sitka spruce, the construction of a power station at Trawsfynydd in the newly designated Snowdonia National Park, the loss of Exmoor's heather moorland to intensive sheep production and the M3 being driven through St Catherine's Hill near Winchester are all examples of beauty trumped by economism.

And yes, it's also a fight against waste in all its forms: litter, good land wasted by sprawl, clutter, and the frittering away of natural resources on buildings that only last a few years.



Thirlmere, Cumbria – a reservoir whose creation provoked a campaign to protect the Lake District. Credit: Richard Towell, Flickr (Creative Commons).

But arguably an even greater threat to beauty is ubiquity and mediocrity. CPRE's earliest campaigns, in the 1920s, were against the design-free, character-free identikit houses and bungalows that sprang up alongside every main road and in the rapidly expanding suburbs. Both Clough Williams-Ellis' England and the Octopus and John Betjeman's "Come, friendly bombs and fall on Slough!" captured the universal dislike of sprawl with its serried ranks of undistinguished housing. CPRE produced design guides for architects, believing that good design, the use of local materials and vernacular styles could do much to make new housing not only acceptable but "belong" in its new location.



Slough, 2014 – "Mess up the mess they call a town" wrote Betjeman. Credit: Kazimierz Mendlik via Wikimedia (Creative Commons).

But in spite of heroic efforts and many excellent later guides (Suffolk County Council's guides were particularly good), by the 1970s almost any housing estate built by a volume housebuilder left the occupant ignorant as to whether they were in Carlisle or Crewkerne, Morpeth, Malmesbury or Maldon. No trace of local inspiration, materials or character was visible; just the same mock Tudor or pattern-book housing everywhere.

By the 1980s things reached rock bottom. Local authorities were instructed to stay out of such matters by the controversial Circular 22/80: "Planning authorities should recognise that aesthetics is an extremely subjective matter. They should not therefore impose their taste on developers." The housebuilding boom of the 1980s was an architecture-free zone, with low-density sprawling housing estates locking us into the car-dependent, anonymous suburbs we now regret, as the recent Transport for New Homes report has highlighted.

And yes, things have got a bit better since then. Whether you support the individually crafted buildings and streetscape at Poundbury in Dorset, or have simply welcomed evidence of a revival of interest in at least some attention to local materials and designs, surely we are past the worst. But good examples are still too few and far between. And this is not just true

for those with a passion for beauty, but – we now realise – for would-be housebuyers up and down the country. When Oliver Letwin published the interim conclusions of his report into the gap between housing consents and completions, among his findings he pointed to the lack of "variety in the aesthetic characteristics" of new housing as one reason why builders are having difficulty in selling them. In other words, house owners are waking up to beauty, and want it in the places they will live.

All this makes it the more timely that the Building Better, Building Beautiful Commission should enter the arena to advocate for beauty in the built environment. It will certainly need to re-establish the importance of design frameworks and to fight against ugliness as well as promote beauty.

For it is clear that we can – contrary to the adage that beauty is in the eye of the beholder – define at least some of the principles that will lead to more beauty in the built environment. A revival of long-established architectural principles would help us: respect for context and surroundings; design that draws on local traditions and styles; the sensitive choice of materials, including those characteristic of the locality; and the presence of an "eye" to bring character, quality and delight. Beauty flows from the inside out as well as the outside in, and good architecture that is sensitive to place can definitely produce beauty.

Similarly, the ability to reject new buildings on the grounds of ugliness is essential. Respublica's 2016 proposals for amending the planning laws have not been implemented: they included a much-needed community right to object to new development on the grounds that it is ugly.

But there's more, always, than aesthetics. Yes, we need new housing and we need it to be built more beautifully. But beauty is more than skin deep, and we must also ask where new development should go, and where it should not. The more we build over our beautiful countryside, the more we lock ourselves into permanent dependence on cars and the unsustainable way we live now. Perhaps the greatest opportunity for our society today is whether we can beautifully remodel our cities, towns and suburbs to create sustainable, mixed, vibrant communities that are not only beautiful to look at, but beautiful – and sustainable – to live in. Now there's a challenge for the 21st century.

3 The economics of building beautiful

by Richard Ehrman

The proposition that if developers would only build better and build beautiful, then opposition to new homes would be reduced and more could be built, should, on the face of it, be common sense. That this would be good for house builders seems equally obvious. But in this country, when it comes to housebuilding, unfortunately common sense is rarely the deciding factor.

That role is reserved for the planning system, the complexity of which grows year by year despite regular attempts at streamlining and simplification. The Town and Country Planning Act, conceived by the Attlee government as a guiding light for post-war reconstruction, has over time morphed into a mechanism primarily concerned with rationing development – particularly of new homes, and particularly in the more prosperous and popular parts of the country where they are needed most.

In such a system, what matters for the house builder is not so much pleasing the customer as satisfying the increasingly intricate requirements of the planners. By the time of the Section 106 contribution, the Community Infrastructure Levy, the affordable home and shared purchase quotas, the provision for cycling, the environmental and wildlife assessments, and all the other myriad matters that make up a big modern planning application have been dealt with, it is hardly surprising that there is not much energy left for what the end product will actually look like.

What matters for the customer, meanwhile, is not so much the aesthetics and quality of their new home but getting a foot on (or up) the housing ladder in a market apparently being driven endlessly skywards by lack of supply. In such a market, if design and quality are not the deciding factors for the planners or the customers, there is little incentive for the builder to put much effort into them either.

With a greater diversity of builders this might not be the case. Traditionally, house building was an industry with reasonable costs of entry characterised by a large number of small and medium-sized companies. One of the unintended consequences of having such a complicated regulatory system is that the market has increasingly fallen into the hands of a few big players. Today, the top 13 house builders account for around 60 per cent of all new home completions.

The number of small builders has fallen from around 12,000, 30 years ago, to perhaps a fifth of that now. You need size to manage the bureaucratic overhead of the planning system and to finance a land bank

to ensure continuity of workload. In other sectors, companies have to compete on quality. But house building in this country is not like most other industries. Increasingly, it has become an oligopoly whose members compete to obtain the land they need far more than they do to improve their product.

So what would it take to change that? Mandating better quality and design sounds good in theory. The success of neighbourhood planning shows that people are prepared to give up time and energy to have a say in what happens to their village or locality. If more neighbourhood plans included local style and material guides, developers would have to take them into account.

But while neighbourhood planning is catching on in rural and suburban areas, it has yet to make much impact in cities or large towns. There is also likely to be less of a consensus on questions of style in more urban contexts, where planners have recently been pushing tall buildings with an eye to relieving pressure on the green belt. Whether or not one thinks it a good idea, this new generation of towers often does not go down well with those who are going to have to live next door to them.

It also needs to be recognised that improved design is already one of the aims of the system. Even the sternest critics accept that the cavalier disregard for traditional styles and street patterns that characterised architecture and planning in the sixties and seventies is rare these days. Most new housing estates over the last decade or so have adopted at least something close to the local vernacular. Yet all too often they still disappoint, usually because the materials are uninspiring and the layout cramped.

To make a meaningful difference, the Building Better, Building Beautiful Commission will have to do more than simply mandate good design. To get developers to up their game it will need to find the right balance of incentives to persuade them that it is in their own best interests to champion better quality materials, better architecture, and a better laid out, more spacious end product.



Help to Buy housing. Credit: Flickr (Creative Commons).

This last point is particularly important because people want bigger as well as better homes. But according to the Royal Institute of British Architects, new homes in this country have actually shrunk in size over recent decades. And with houses, especially, outside space is also important because they tend to look a great deal better when they have reasonably sized plots and are not too hemmed in.

Even stating this much, however, will not be uncontroversial. Better materials are something we can all agree on. But architecture and planning are infused with ideology, while anything that involves green fields or the green belt is pretty much guaranteed to be contentious.

Since none of the above will come cheap, the key to making progress is likely to be where and how the resources to build better are found. One suggestion would be for planning authorities to reduce some of the other obligations developers have to pay, such as affordable housing and the Community Infrastructure Levy, and try instead to channel the money into design and build quality. But with the big house builders making large profits (underpinned by public subsidy in the form of Help to Buy) this would be bound to be seen as doing them yet more favours. Politically, it would surely be a non-starter.

An alternative might be some form of windfall tax on the profits of the bigger developers. Given the oligopolistic concentration of the industry, it is certainly questionable whether a freer market would produce profits of the sort the big players have recently achieved. But windfall taxes have their problems too. They are usually one-off, and developers' profits, notoriously, can go down as well as up.



Town and country – we need to look toward the land market for answers. Credit: Mike Bishop, Flickr (Creative Commons).

Instead, to find the key to better quality and design we need to go one step further back to the developers' raw material, land – and not just any land, but sites with planning permission in places where demand is high.

In our system the decision on where and what to build rests firmly with the authorities, both local and national. This gives local planners great power but also presents them with a dilemma. On the one hand, they are faced with increasingly strident demands from central government and frustrated would-be homeowners to speed up the system and provide more housing. On the other, they have to contend with local opposition which is often vociferous — especially if any green field land is involved.

The answer, all too often, is to try to square the circle by cramming as much development as possible into as small an area as possible. This may help to defuse the conflicting pressures the planners face. But with competing land scarce or unavailable, the inevitable result is that sites with permission leap in value the moment they are designated – sometimes by as much 10,000 per cent.

It is a wonderful system for landowners who are lucky enough to have their sites picked for development. And it also suits the builders because, although they have to pay dearly for land, they can be confident that a rival is unlikely to get another permission nearby and undercut them. But when it comes to encouraging better quality, the incentives are all facing the wrong way.

If a developer can sell what he produces without having to worry overmuch about competition, building to the lowest common denominator makes business sense. A more spacious lay out is also precluded by the price paid for the land and the density agreed with the planners — who, like the developer, usually want densities to be higher rather than lower.

To turn this round, either land has to become cheaper to allow real competition to develop in which quality and design play the part they do in most industries. Or the state, in one guise or another, has to intervene to capture much more of the uplift that occurs when land gets planning permission, and use it to improve the resulting development.

Neither, though, would be simple, especially in political terms. If reducing the price of land means — which it logically would — that more of it is released for building, it is likely to incense shire Conservatives and environmentalists alike. At the other end of the scale, a statist "land value capture" solution would raise fears on the free-market Right of land being expropriated, even though it is how the post-war new towns were built and is the model suggested for large sites in the recent Letwin report.*



The value of land increases significantly when permission is given for new homes.

Credit: Flickr (Creative Commons).

Poundbury and the Duchy of Cornwall's other developments have shown that high quality, well laid out private sector development is possible today. But the Duchy started with the advantage that it owned the land it was seeking to develop. Land, its price and availability, is the key to better quality and design. We are not intrinsically short of land: Surrey has more of its surface area given over to golf courses than homes, according to the LSE's Paul Cheshire.

It is how we choose to use it that matters; do we allow a bit more to go for building if the result is better quality and design? Should we allow more encroachments on the green belt if people in inner cities do not like the new towers they are asked to accept? Or do we continue to cram as much development as possible into as small a space as possible, even though we know before it gets off the drawing board that we are not going to like it when it is built?

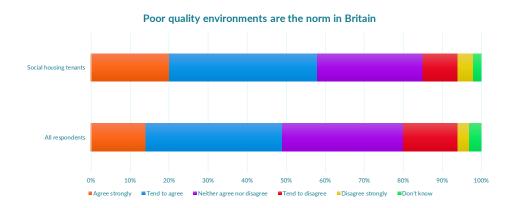
^{*} The author was a member of the expert panel that advised Sir Oliver Letwin on his report.

4 How to create beautiful social housing

by Zac Goldsmith MP

At a time when there is too much ugliness in political discourse, I have been heartened by the Government's new commitment to championing beauty in the built environment. The Building Better, B

The test that I will hold the Commission to when it publishes its full report in late 2019, however, will be the extent to which it talks about enhancing beauty for people who live in social housing. For the unfortunate truth is that it is they who are most deprived of buildings and public spaces that are beautiful. Public polling commissioned by Policy Exchange finds that social housing tenants are much more likely to think poor quality environments are the norm.¹ 58 per cent of poll respondents living in social housing thought this compared to 49 per cent of all respondents.²

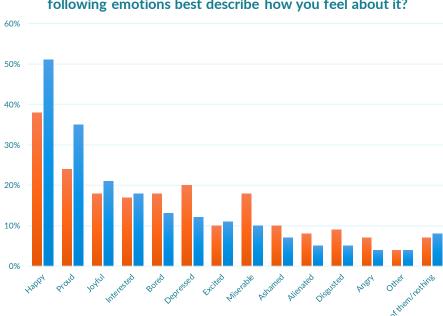


Data source: Policy Exchange/Deltapoll

Policy Exchange's polling also finds social housing tenants are much less likely to feel positive emotions about the look and feel of the home they live in than their fellow citizens. Poll respondents who live in social housing were much less likely to feel happy and proud of their home than other respondents. They were also much more likely to feel bored, depressed and miserable about their home than people living in other tenures.

Public polling prepared by Deltapoll. Online fieldwork dates: 3rd May-10th May 2018. 5,013 respondents from London and the South East.

^{2. 13%} of poll respondents living in social housing disagreed and 17% of all respondents disagreed.



Thinking now about the look and feel of the home in which you currently live, which two or three of the following emotions best describe how you feel about it?

Data source: Policy Exchange/Deltapoll

To me these polling results shine a light on how bad a job we are doing as a nation in providing decent homes to people no matter what their income. The aim must surely be, as the Prime Minister said in a speech earlier this year, for all homes to be built to the highest quality with no way of telling from the outside which properties are built for housing associations and which are destined for the private market.

■ Social housing tenants

As the Government begins to talk about beauty, it has to be in the context of beauty being a universal value — one that must be enjoyed by all. In fact there is a rich history of British governments equalising access to beauty. Take, for instance, the actions of the post-War Attlee Government. The 1949 National Parks and Access to the Countryside Act, which was supported by all parties, created the first 10 national parks and mandated the provision and maintenance of public paths, bridleways and other highways. Much legislation since then has increased public access to beautiful places.

So how can we do a better job of providing beautiful social housing? When I walk around the area near the Houses of Parliament, I see the brilliant Peabody estates, which, to me, seem an exemplar of what we should be aiming for. Although many were built in the late 19th Century, they have more than stood the test of time. Not only do the estate buildings fit in with their surrounding area, more often than not, they are built to a higher design quality.



Peabody Trust Estate, Vauxhall Bridge Road. Credit: Paul Farmer via Wikimedia Commons (Creative Commons).

I am also encouraged by the high standards of recently built social housing. Some of the best new homes are built not by private developers but by local authorities and housing associations. In a number of places they are building what I believe will be the conservation areas of the future.

The challenge, as I see it, is not the very old social housing, nor the new social housing, but the social housing which was built in the period after the war. Despite the ambition of the time – Nye Bevan, the post-War Housing Minister, spoke eloquently against compromising quality for quantity³ – many of these estates were built in a rush. With an eye (understandably) on the urgent rate at which they were needed, the Labour Party had promised the electorate to "build the houses quick", as opposed to focusing on building them to last.

The same attitude continued in the Conservative governments of the 1950s. Toby Lloyd, now the Prime Minister's housing adviser, has described how the "slight fly in the ointment" of the council house building drive of Harold Macmillan, Housing Minister between 1951 and 1954, "is that not all of them were the best houses. Some of the most shocking tower-block monstrosities were built in that era."

The result is that today there are thousands of social housing estates across the country that are dilapidated and coming to the end of their lifetime – in London alone there are 3,500 such estates. Often they have been built in a way that isolates them from the existing area and often they are of poor design and build qualities. They also tend to perform badly on measures of sustainability and energy efficiency. We face the serious task of rebuilding these estates – a process often called "estate regeneration" –

When pushed on the need to increase housing numbers by Clement Attlee, then Prime Minister, Bevan responded: "We shall be judged for a year or two by the number of houses we build; we shall be judged in 10 years' time by the type of houses we build"

https://www.conservativehome.com/ thetorydiary/2013/10/how-macmillan-built-300000-houses-a-year.html

in a way that helps to solve not just the housing supply crisis, but also to provide better quality homes that have been built in a way people like and that improves their living environment. As we face up to this task, there are two points to make – the first of which concerns the opportunity to increase the amount of social housing available.

Many of the local authority housing estates built in the decades after the war were built as tower blocks in low-density layouts. A report published in 2016 by Savills found that 360,000 additional homes could be accommodated within a fifth of London's existing local authority housing estates if they are rebuilt in a high-density street-based layout fully integrated into the urban fabric.⁵ In practical terms this means that instead of tower blocks, we could build estates consisting of mid-rise apartment buildings and terraced housing with open spaces. Crucially, they would be rebuilt at a human scale with an eye to enhancing beauty in the built environment.



De Beauvoir Estate, Hackney – completed in 1971. Credit: Tarquin Binary via Wikimedia Commons (Creative Commons).

My second point concerns the sensitivities associated with estate regeneration. The nub of the matter is that estate regeneration involves the knocking down and rebuilding of people's homes. The people who live in those homes have every right to be worried about the process — any local authority rebuilding an estate has the utmost responsibility to rehouse existing residents in the place they call home. But the answer to this problem shouldn't be to give up on redevelopment plans or, worse, to ignore residents' concerns altogether.

https://pdf.euro.savills.co.uk/uk/residential---other/ completing-london-s-streets-080116.pdf



Ham Close. Credit: Google Streetview.

In my campaign to be Mayor of London I never shied away from this issue. My manifesto pledged to introduce a Residents' Development Guarantee which vowed estate regeneration would only take place when, among other criteria: plans were supported by a majority of local residents, existing residents were involved from the start, rebuilding was phased so that a majority of tenants stayed on the estate during the process and only moved once (from their old to their new property), and residents were guaranteed the same sized home at the same rent level.

I am disappointed that Sadiq Khan's new draft London Plan only requires proposals for estate regeneration to "take account" of good practice instead of providing residents with a guarantee that certain conditions will be met. It seems a missed opportunity to face up to some of the sensitivities that prevent estate regeneration from happening on a scale that makes a difference to the capital's housing supply crisis. It is also a sop to developers who think these sorts of obligations are too onerous.

My disappointment only mounts when I consider the case of Ham Close in my constituency – an example which shows the potential of estate regeneration. Ham Close is an estate of 192 flats built in the early 1960s by Richmond Council. It is now owned by RHP, the housing association that manages the Council's old housing stock, and is in dire need of rebuilding. RHP has plans to redevelop the site into one that has close to 450 homes that are both of a much higher quality and properly integrated into the surrounding area. Those plans are coming along apace. Undoubtedly there have been hiccups in the process, but it is my belief that its progress has been underpinned by RHP's commitment to residents, along the lines that I pushed in the mayoral election. It is much better to face up to these issues than to let plans that could drastically improve the living environment of many thousands of people drown in political wrangling.



An aerial view of the Ham Close site –a layout of low density tower blocks. Credit: RHP/Richmond Council.

Of course, not all social housing tenants live in estates and not all estates are of poor quality. But estate regeneration seems to me one of the most vital issues that the Building Better, Building Beautiful Commission can tackle. Done well, in the way I have described, it is an idea that is popular with the public and that makes good financial sense in the long term. Above all, estate regeneration can create places that are beautiful and community-minded for the people who say they suffer ugliness the most — and that, from myself, to Sadiq Khan, to the Prime Minister, is something we can all get behind.

5 How to build homes, not just houses

by Marwa Al-Sabouni

What is home? It's a question that has haunted me for the last eight years of Syria's civil war. I'm a practising architect, born and raised in Homs, in the mid-west of the country. The city around me – my home – is semi-destroyed now. Most of the old town, where I used to have a studio with my husband in the main square, is gone. Half of the city's other neighbourhoods have been reduced to piles of rubble: they exist only in people's memories.

Homs is quieter now, at least. The snipers – who turned crossing a street into a mission that required courage – have vanished. The mortar missiles, the most abhorrent weapon of all, have stopped raining down. The first time I heard one, it sounded like a giant bowling ball had landed in the street outside with a cruel, dead thud. My window was smashed from the impact, and I looked outside to see if the young boys who had been playing football had been hurt. All of them had been killed. It was a tragedy that I saw repeated, over and over again.

My family and I have been lucky, by comparison. Our own flat is still standing. I have started teaching, and with my husband, who juggles a few different jobs, I've opened a small bookshop. We are trying to re-establish a normal life. But having witnessed such mass destruction and violence at close quarters and escaped it, I have found myself searching for answers. What led to this senseless war? What made Homs – where the fighting first broke out – different from other cities, and why did it have a "special destiny"? How, as my shattered country rebuilds, can we stop this happening again?

There were many causes of the war - social, political and economic. But I believe there is a reason for the violence that has been overlooked by most Syrians and nearly everyone in the West. And that reason is the "loss of home" that many ordinary people have experienced over the last 50 years, as a result of Syria's housing crisis. This crisis has unfolded in three stages, the last of which is happening as I write.

Stage 1: "La mission civilisatrice"

It isn't just the civil war that has brought destruction to Syria. That began long before, with the urban planners of the colonial period. The French decided that the cities were un-modern and in need of re-ordering. In 1925, for example, they blew up the Harika ('Fire') area of Old Damascus, in order to replace its ancient, organic network of streets with a modern cartesian plan.

This was the beginning of a great unravelling. Old cities were not allowed to adapt on their own, and gradually, to the needs of modern life. They were treated as blank slates – raw material for "la mission civilisatrice". Over time, the natural harmony of the built environment and social environment got trampled over by elements of modernity. Stone houses were demolished and replaced with four or five-storey concrete tower blocks. The contrast between the unloved, crumbling old and the brash, ugly new backfired on both.



Homs in 1900. Credit: Matson Collection via Wikimedia Commons (Creative Commons).

Communities lost their sense of place, of belonging, since there was less and less in their environment to hold them together. And all over Syria, people were increasingly zoned by creed, class and affluence, adding to a feeling of alienation.

As I have written in my book The Battle for Home, this showed the social role of architecture. The old Islamic cities, whose architecture and street patterns helped to bind communities and safeguard civic peace, had been vandalised by a colonial enforced modernisation. Their urban and social fabric was sabotaged. The places that had helped to sustain peaceful coexistence, by virtue of providing people with homes and not merely houses, were lost.



Typical Damascene Ottoman architecture which uses the famous Ablaq (alternating wall rows of black basalt and limestone). Credit: James Gordon via Wikimedia Commons (Creative Commons).

Stage 2: The informalities

You might be surprised to learn that my country's capital, Damascus, and your country's capital, London, were in the same 'top ten' list in 2010. They were both ranked among the most expensive cities for real estate. London, where one square metre of property cost &1,403, was ranked third. Damascus, where one square metre of property cost &979, was ranked eighth.

These figures illustrate a sad truth to me: after the systematic destruction of large parts of Syrian cities during the colonial era, what followed was more destruction but in the name of speculative development. The monetary value of property became utterly detached from how people used and experienced it. Apparently, as a Syrian in 2010, I had more chance of buying a house in New York than Damascus. An average Damascene apartment would have cost well over €400,000.

In response to prohibitively high prices, and partly because of high rates of migration from the countryside to the city, much of the Syrian population built their own housing, informally and illegally, in what has become known in Syria as the 'informalities'. After these bare concrete blocks were built, crammed and haphazard and often on the edge of cities, the government installed basic infrastructure poorly and neglectfully. In 2010, 40 per cent of Syrians lived in informalities. Today after the mass destruction of the war, some reports say the figure is now over 60 per cent.



Destruction in Homs. Source: Ghassan Jansiz.

To make matters worse, before the war the government used, every now and then, to pick one area of the informalities to evacuate so that they could create a so-called development project. Most of what has been built was used for market broking; so more and more vacant, horrible-looking buildings were erected, real estate prices were inflated, and more people were displaced.

It was hardly a surprise that these areas of informalities were the places where violence first erupted and where chaos reigned. Their inhabitants felt no sense of sharing a place with others – and with that, I would argue, it became so much easier to give into violence when the war arrived. To me it was shocking proof that when places fail to create attachments among people, stability can easily collapse.



Destruction in Bab Dreeb area in Homs, Syria. Credit: Bo yaser via Wikimedia Commons (Creative Commons).

Stage 3: Law No. 10

Earlier this year, a law was passed that allows the Syrian Government to designate specific war-torn areas for redevelopment. The law, known as Law No. 10, gives people who used to live in such an area one year to prove their residency by providing documentation in person. It then gives them three options: they become shareholders in the rebuilding, they sell their shares in a public auction, or they establish their own contributing company to invest in and build the redevelopment.

Law No. 10 has led to pages of international humanitarian reporting because of concerns over 'demographical engineering'. In the words of Robert Fisk, Middle East Correspondent for The Independent, "The new Law No. 10 calls for what looks like mass property expulsion in those areas of the country which rebelled against the Syrian government after 2011."

For me, one of the most threatening aspects of this law is it will turn more people into investors. And so it will kill any chance of giving them a home. Everybody will be busy climbing the property ladder, which I fear will only lead to further crisis.

Finding a new way to build

As Syria rebuilds, there is a clear lesson to be learnt from each of the stages I have described: that more houses does not mean more homes. We must remember that home is not a commodity; home is a community, and it is all too related to how we build not how much we build. We have made this mistake in Syria and look where it has got us. I can only hope we begin to learn from our past mistakes.

The situation in Europe is not directly comparable to Syria and elsewhere in the Middle East. But all over Europe's cities, there are signs of urban disintegration and instability. Look at the banlieues that encircle Paris and not infrequently erupt into riot. Or at the zoning by race and religion in some northern British cities. I am not for a moment saying this could lead to the sorts of outcomes I have witnessed in Homs. But if people are made to exist on the margins of society in ugly environments, and if they are deprived access to beautiful ones whether by cost or government choice, they are likely to live with resentment. What is home? Our answer to that question matters.

Architecture is not the centre of human existence, of course, but the coherence of old Islamic cities and many old European towns promote integration. Soulless concrete tower blocks and sprawling estates do the opposite. They do not encourage people to think that their community is worth keeping or contributing to. As urban centres expand – or in the case of Homs, are rebuilt – we need to find a new way to build, so that cities can be civilised environments made from a continuous fabric, where communities can live in peace. That's what a home should be.

6 The need for beauty

by Sir Roger Scruton

What is beauty and why do we need it? All thinking people recognise that this is a real question, and one of especial relevance in the disordered times in which we live. Indeed, in the case of the built environment, there is no question more urgent.

We should start with the small things, since they are easiest to understand. In many everyday activities, such as dressing, arranging a room, putting goods and flowers on display, we are concerned to get things to 'look right'. We do not do this merely for our own sake. Always there is an implicit community of observers, for whom it matters how things look. In effect we are making the adjustments required by social harmony. All aesthetic judgment is like that, as Kant showed in his great treatise on the topic. As he put it, in the judgment of beauty we are 'suitors for agreement', and this means that others are free to criticise, to ask us 'why?'

This does not mean that those who disagree can be persuaded; nor does it mean that those who agree can find the reasons for doing so. But it implies that there is some core set of aesthetic constants to which human nature is attuned. In this matter aesthetic judgement is closely related to moral judgement. The core moral judgements are objective, even though nobody – not even Kant or Aristotle – has found the final proof of them. They are objective because rational beings, consulting only the facts, and setting aside everything that might compromise their impartiality, will come to agree on them, or at least on a central core of them. You will agree with your neighbour about the evil of murder, rape, enslavement, or the torture of children, so long as you and your neighbour put self-interest and passion to one side. Those who don't agree with such judgements cannot as a rule be persuaded; but that is because they cannot and will not be dispassionate.

Something like this is true in aesthetics. About basic matters rational beings have a spontaneous tendency to agree, provided that they set their special and distinguishing interests aside. But in this area it is extremely unlikely that they will disregard their own interests. Those most notorious for rejecting basic principles are those with the heaviest investment in doing so: in the case of the built environment, that means developers and architects. There is therefore a powerful vested interest in the view that there are no objectively valid standards of aesthetic judgement, or the view that standards must always be shifting, in obedience to social, economic and technological change.

Subtract the profit-makers and the vandals, however, and ask ordinary people how their built environment should be designed – not for their

private good, but for the common good - and a surprising level of agreement will be reached. People will agree, for example, on scale: nothing too big for the residential quarters, nothing too broad or tall or domineering for the public parts. They will agree on the need for streets, and for doors and windows opening on to the streets. They will agree that buildings should follow the contours of streets, and not slice across them or in any way arrogate to themselves spaces that are recognisably public and permeable. They will agree that lighting should be discreet and if possible mounted on permanent structures. They will agree on the humanity of some materials and the alienating quality of others; in my view, they will even agree about details such as mouldings, window-frames and paving stones, as soon as they set them in the context of comparative judgement, and learn to think of them as chosen not for their own personal benefit, but for the common good. The classical styles in architecture, in particular the pattern-book vernacular familiar from Haussmann's Paris and the comparable vernacular of Georgian London, embody this kind of reflective agreement.



The Parisian vernacular. Credit: Mar Kiddo, Flickr (Creative Commons).

Traditional ways of building were based in composition, so that detail followed detail and part answered part. The principles of composition that they followed have been exemplified in all civilisations that have left a record of themselves in their artefacts and buildings. They are followed by life itself, and govern the process that unites part to part and part to whole in a complex organism. Because these principles correspond to our own life-processes, we intuitively recognise their authority, are at home with buildings that obey them, and uncomfortable with buildings that do not. The forms, scales, materials and surfaces of many modern buildings deliberately flout these principles, and this is a sufficient explanation of the hostility that they arouse.

Christopher Alexander, the Austrian-born British architect and theorist,

now a professor at Berkeley, has over decades consistently advanced the idea of a timeless way to build. He writes:

There is one timeless way of building. It is a thousand years old, and the same today as it has ever been. The great traditional buildings of the past, the villages and tents and temples in which man feels at home, have always been made by people who were very close to the center of this way. It is not possible to make great buildings, or great towns, beautiful places, places where you feel yourself, places where you feel alive, except by following this way. And, as you will see, this way will lead anyone who looks for it to buildings which are themselves as ancient in their form as the trees and hills, and as our faces are.

Alexander supports that far-reaching claim (made in The Timeless Way of Building) with a kind of generative grammar of architectural form. He lays down rules that produce results that can be understood by the ordinary user of the building, who unconsciously recuperates the process whereby the building is composed, in something like the way we recuperate the deep structure of one another's sentences.

Alexander is one of several thinkers who have proposed that the solution to the problem of urbanisation is contained in the concept of scale. Successful buildings are not given size and shape, as it were, in one gesture, as though poured into a mould – though that is what happens in the cast-concrete monsters and curtain-wall bottles that have desecrated our cities, or the computer-generated bubbles and gadgets that have erupted across them in more recent years. Successful buildings achieve their size and shape, one important thinker has argued, by a hierarchy of scales, which enables us to read their larger dimensions as amplifications of the smaller.⁶ The architect ascends from the smallest scale to the largest through the repeated application of a 'scaling rule', which requires that the increase in scale from one level to the next in the hierarchy should be by a constant multiple. The choice of the constant is not arbitrary, since life itself seems to favour, in the fractal structures of snowflakes and crystals, in the exfoliation of leaves and cells, a figure in the neighborhood of three, and it is the 'rule of a third' which, according to Nikos Salingaros has been applied by master architects throughout history – for example in requiring windows to be a third of the width of the wall that they puncture. Any number smaller than three will produce a cramped and cluttered surface, in which higher orders are not clearly differentiated from lower, and any number much larger will produce vast vacancies, such as we witness in the blank walls of glass that are the ever more familiar background to city life.

Nikos Salibgaros, A Theory of Architecture, Solingen, Umbau-Verlag, 2006



20 Fenchurch Street (A.K.A. the Walkie Talkie building), City of London – a monster that has desecrated the City. Credit: Tom Parnell, Flickr (Creative Commons).

On that view modernism went wrong from the start, with Adolf Loos's famous dismissal of ornament – a dismissal that effectively left the lowest end of the scalar progression undefined, so that everything larger became free-floating and ungrounded. Likewise, the use of poured and moulded materials that are without their own deeply embedded fractal structure is responsible for much of the lifeless quality of modern buildings, whose surfaces are without those textures that we recognise in flesh, rind and cliff-face: textures that themselves yield to scalar analysis. Similarly, the narrow boundaries that frame modern buildings – the edges of steel

girders, the abrupt stumps of pilotis, the alloy frames of windows that cannot be opened, and the invisible edges of sliding or revolving doors – all serve to render boundaries weak, machine-honed and inflexible, as well as costly to produce and usually produced off-site, without reference to local conditions and irregularities.



Elder Street, Spitalfields – the aesthetic constants of Georgian London. Credit: Andrea Kirkby, Flickr (Creative Commons).

Architecture without meaningful detail or grainy textures estranges us, because it frustrates our visual and cognitive capacities. The aesthetic constants are rooted in life-processes that lie deeper than any single tradition of visual grammar. We understand these constants by incorporating them into a visual language shaped by comparisons and adapted to the needs of social life. Only in the context of a live tradition are such constants really intelligible to us as aesthetic demands. In order to take note of them, therefore, we need to work within an adaptable grammar of form.

Styles change by adapting, and buildings too adapt. If we abstract from the present and future functions of a building, and ask ourselves how it should nevertheless be constructed, then we have only one reliable guide. It must look right. We should not search behind the appearance for the hidden reality. Aesthetic value is the long-term goal, utility the short-term benefit. Nobody wishes to conserve a building, if it does not look right; but if it does look right, someone will find a use for it.

However, most users of a building are not clients of the architect. They are the passers-by, the residents, the neighbours: those whose horizon is invaded and whose sense of home affected by this new intrusion. This is why patterns and types are so important. The Georgian pattern-books offered precedents to builders, forms ultimately derived from temple architecture, which could be relied upon not to spoil or degrade the streets in which they were placed. The result was the creation of whole

townscapes that we are now eager to live in and equally eager to conserve. The failure of modernism lies not in the fact that it has produced no great or beautiful buildings. It lies in the absence of any reliable patterns or types, which spontaneously harmonise with the existing urban decor, and retain the essence of the street as a common home. The greatest need today is for a pattern-book that is faithful to the enduring principles of aesthetic order, while adapted to new materials and new building techniques. Only prejudice prevents us from developing such a thing. It is unfortunate that this prejudice is taught in all our schools of architecture.

It is pertinent to add that the issues that I have briefly surveyed in this article will be addressed in a more practical way by the Government's Building Better, Building Better, Building Better, Ommission, of which I am chairman. The Commission has to report on the ways in which the public demand for acceptable design and beautiful aspect in the built environment can be satisfied, within the constraints affecting new development. There is no one style, no one template, no one conception of space and its uses that will satisfy the many demands before us. But if we do not put beauty at the top of the agenda we risk blemishing forever the face of a country whose beauty is one of the most important reasons why our ancestors laid down their lives in its defence.

7 Let us build popular mansion blocks

by Sir Terry Farrell

Walk through central London, from Clerkenwell to Covent Garden to Marylebone, and you will see some of London's most popular and joyful neighbourhoods: the gas-lit alleys of the Strand, the streets that radiate from Seven Dials, the ordered chaos of the area surrounding the BBC's New Broadcasting House. Though their roads are clogged with traffic and their main streets are sometimes overwhelming, to me they are a brilliant form of urbanism. Not too high, full of character and charm, places where life spills on to the pavements. As London faces up to its housing crisis, these are the kinds of streets and buildings that we should hope to build many more of.

Of course, the sense of life and joy a street or building can give is not something that can simply be created anew. London's neighbourhoods are the product of layers and layers of history. This is why they are so different to one another. But it should be possible for those of us in the business of place making – by which I mean architects like myself, but also planners, developers and contractors – to build the sorts of homes and streets that the public find beautiful. The Clerkenwells, Covent Gardens and Marylebones of the future.

This is essential not just because London needs to grow – the Mayor's draft new London Plan sets a target of 66,000 new homes per year – but also because it needs to expand in a way which adds to, rather than takes away from, the reasons why people like this city and give up so much to call it home. Too often, and sometimes unfairly in my opinion, the public associate new development with ugliness and the loss of space. It is incumbent on my industry, architecture, and our partners in planning, construction and yes, the Government, to change that. We should start by listening to the public.

Let us build what is popular

It is peculiar that the most prized properties tend to be the oldest. In most other industries, a product's value sharply depreciates the moment it is bought for the first time. In the housing market, signs of ageing are encouraged. The product is literally recycled. This is the case in London where one of the most popular and desirable forms of property has been the mansion block.



Mansion flats on Hornton Street, Kensington, London. Credit: Mermayden via Wikimedia Commons (Creative Commons).

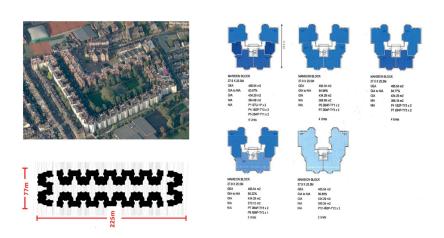
The mansion block typology, which is closely built around courtyards and creates the sort of traditional London street patterns that are so popular, offers a high rate of density without rising too far from the street (typically around five to ten storeys). Defined by their space, style and history – they were mainly built in the late-Victorian and Edwardian eras – mansion flats are reported to be some of the most desirable properties in the capital.

It wasn't always this way. The upper classes of 19th century London, used to houses that were split between masters and servants, were initially sceptical of apartment living. There was a prejudice against what was seen to be a Parisian way of life. This is described in an 1871 article in The Architect, which argued that, unlike Parisians, the English gentry were not ready to share their quarters with people of a different background:

"It would be difficult to quote any institution of the French which English people might less readily fall in with, than that which consigns the tenancy of the half dozen successive storeys of the same house to just as many utterly dissociated and indeed discordant people, ranging from a jaunty viscount on the premier étage... to a little nest of the humblest workpeople on the cinquième, all meeting on the common stair."

Happily, The Architect was wrong. Developers like Henry Hankey and architects like Richard Norman Shaw pioneered the construction of mansion blocks across much of the capital. The dominance of mansion blocks in many central London streets — not just in neighbourhoods I have mentioned like Clerkenwell, Covent Garden and Marylebone, but also places like Kensington, Islington and Bayswater — stands testament to their enduring popularity.

THE TRADE; DENSITY FOR INCREASED PERIMETER

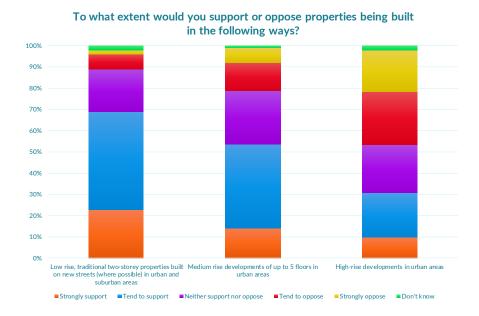


The mansion block typology. Credit: author

Mansion blocks for all

Since the First World War, new mansion blocks have been few and far between. But it is my opinion that modern London needs a renaissance in mansion block building - learning from, and even imitating, those that were built by our predecessors in Victorian and Edwardian London, and designed to suit contemporary needs. As well as being some of the most desirable homes in London, public polling for Policy Exchange also shows that Londoners want more mansion block-like homes.

When asked which sorts of properties they would support being built, a majority of respondents from London supported the building of mediumrise developments of up to five floors in urban areas. Just 20 per cent of respondents opposed them being built, much lower than the opposition towards high-rise developments in urban areas (supported by 31 per cent of Londoners and opposed by 45 per cent).



Data source: Policy Exchange/Deltapoll. Respondents from London, N=2,429

Although the construction of low-rise two storey properties in urban and suburban areas was most popular (supported by 69 per cent of Londoners and opposed by 9 per cent), I am encouraged that mediumrise developments, typified by mansion blocks, polled so strongly. Their density and popularity make them an ideal answer to London's housing crisis — as opposed to building upwards or urban sprawl — that planners should welcome and that developers should learn to love again. I hope to see them built again across the city and for people of all incomes — not just those who can afford to live in London's most expensive areas.

But to achieve this, and to build the sorts of homes, streets and places that we know Londoners like, the planning system needs to privilege public preference. Unfortunately, all too often it does the opposite.

The rules that privilege tall buildings

It would not be possible to build Clerkenwell, Covent Garden or Marylebone anew today. Clues to the reason why can be found marked beneath windows of the old brick buildings in these neighbourhoods. The signs that read 'Ancient Lights' show when property owners have asserted their right to receive natural light through their windows. The law, which was introduced in England in 1663 and which continues to this day based on the 1832 Prescription Act, means that new buildings cannot deprive existing buildings of an acceptable level of light.



Ancient lights signs in Clerkenwell. Credit: Mike Newman via Wikimedia Commons (Creative Commons).

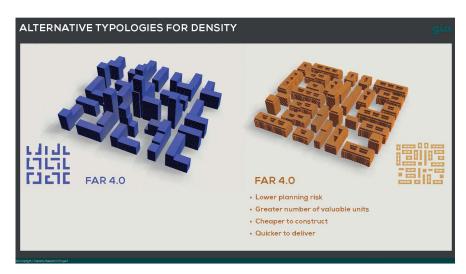
The 'right to light', as it is commonly called, is judged on a case-by-case basis, but its principles are now embedded in guidance on access to daylight and sunlight issued by the Building Research Establishment (BRE) — it is applicable to the construction of all new buildings. The guidelines, last updated in 2011, outline the levels of daylight and sunlight that should be received by existing and new development. To maintain these levels of daylight and sunlight between buildings that face each other, the BRE say that buildings should be a minimum space apart (typically between 18-21 metres). These orders would be broken by many of the mid-rise, high-density buildings like mansion blocks in Clerkenwell, Covent Garden and Marylebone.

As the name suggests, the guidelines are only advisory. In fact, the BRE say that in urban areas or historic town centres "numerical guidelines should be interpreted flexibly since natural light is only one of many factors in site layout design". Yet my experience has been the opposite. Tightly resourced planning officers like shorthand, while developers like certainty. They want to avoid the delay and expense of dispute, so the easiest route is taken: architects are told by developers to comply with the perceptions of the planning officer and to design buildings that will not be challenged on daylight and sunlight guidance. What was meant to be guidance has in effect become strict rules that now dictate the layout of new developments. The result has been perimeter blocks built ever further apart and the construction of ever taller buildings — an urban form quite different to the traditional street patterns and buildings that the public want and cherish.

Thinking again about access to light

I do not for a second think people's access to light is unimportant. It is an essential part of a healthy city. But these guidelines that are set nationally and, in my experience, selectively and mechanically applied, are preventing us building the exact sorts of homes that support people's happiness and wellbeing. The guidance was written in an era of modernism when it was thought that, through denying light and air, density was a cause of illness. Today we know this thesis to be wrong – so it is time for us to think again about the daylight and sunlight regulations that are warping London's growth.

New daylight/sunlight guidance should be drafted that is specific to London and which is more balanced towards producing good layouts and good urban habitats in ways that people like. We shouldn't hesitate from basing what we define as 'good' upon the traditional layouts of the places I have praised in this essay. In fact, if it can be demonstrated that a new development achieves the same density and urban form of conservation areas like those in Clerkenwell, Covent Garden and Marylebone, it is my opinion that it should be deemed acceptable by planners.



The mansion block typology. Credit: author.

This would produce the sort of built environment the public want in a way that is economical to developers. Although the astronomical value of land in much of London has caused many developers to turn to high-rise buildings as a way of achieving density, the truth is high-rise buildings offer developers very little flexibility. Their construction cannot be staggered according to the property market. Developers must make the upfront financial commitment on the assumption every apartment will be sold. Only last month we saw the risk of this strategy in the redevelopment of the Centre Point skyscraper – it was announced that half of the tower's 82 luxury flats were taken off the market after poor sales.

Lower-rise buildings, be they mansion blocks or terraced housing, offer the developer far greater flexibility than those that are high-rise. They are a bit like a sausage machine: you can build 4 or 5 and then wait to see how the market changes. There is also opportunity for prefabrication and cost efficiencies in repetition.

As London faces up to its housing crisis, we should have no shame in looking to ideas from the past and to replicate them far and wide. Mansion blocks offer high levels of density, their development can be phased in a way that makes them economical; and, above all, they are enduringly popular. The Housing Minister, Kit Malthouse MP, is fond of saying we need to build the conservation areas of the future. So as the Government looks for methods to build more homes in the designs and styles that the public find beautiful, let us find a way to allow mansion blocks for the 21st Century.

8 Should architects care what the public think?

by Ben Derbyshire

Some in my profession believe that the fault in arguments over architectural traditions lies among our clients and the public who need to be educated to like what we do. I do not share that view. While better understanding between the public and professions is undeniably helpful, there are other issues at stake.

I want to focus on one particular aspect that I think is often overlooked: the importance of listening to the public when it comes to how we work.

Alongside my role as President of the Royal Institute of British Architects (RIBA), I chair the housing design practice I first joined in 1973. We celebrate our 50th anniversary next year as a business which has changed in size and in our clientele over that period. We were weaned on a workload of homes for private clients. But by the early Eighties, with our work for local authorities and community groups, we had become known as leading 'Community Architects'. One aspect remains unchanged – the urge to meet the needs and aspirations of our customers, individual or collective, was established as the DNA of our business from the beginning. And as president of the RIBA, I bring this perspective to the profession as a whole.

Some of the techniques of stakeholder engagement we helped to pioneer have since become accepted practice. Despite this, external factors such as the financial crisis, the austerity-driven withdrawal of public subsidy from housing development and the increasing reliance upon the major speculative homebuilders have conspired to ensure that the public are still bystanders, by and large, in the creation of the built environment. This disengagement from the views and preferences of the public points to a bigger problem: true public engagement requires investment of resources. What passes for meaningful engagement is often no more than vacuous advertising.

But we do have the resources to do it properly and for success we must invest them. After all, developers and estate agents are about as popular with the general public as journalists and politicians. But this enmity has done little to stop them reaping substantial rewards from their work. In contrast, while we profess our admiration for their work, when was the last time you saw a nurse, care worker or member of the armed forces storm off camera after taking umbrage at questions about a £75 million bonus that came in large part from a demand-side government subsidy aimed at helping make housing more affordable?

The market dominance of a small number of large housebuilders has

made it difficult to bring a consumer influence to bear. The housebuilders have a refined business model honed to deliver shareholder profit and a supportive policy context. Given a captive market and the ability to pocket a legally protected 20 per cent return on investment, many developers have little or no incentive to consider the aspirations of their customers at all thoroughly: people are going to make do with whatever they can get their hands on. They are driven by necessity rather than choice. As the Letwin Review identified, this is a business model based upon the efficient (and very lucrative) exploitation of a very limited market segment – giving rise to the prevalence of a product which the political zeitgeist now challenges on the basis of its ubiquity. Whatever your personal tastes, it should be depressing to all that a vanishingly small percentage (probably less than 1 in 10) of new homes ever sees the inside of an architectural studio. So, if we want something different, we must create a new context capable of delivering places that people want. We need to show people that better new homes are possible and how good design can make their lives easier and more enjoyable. Unless and until we succeed in this, communities will understandably continue to resist new neighbours in new development.

At the Royal Institute of British Architects (RIBA), we recently published Ten Characteristics of Places PeopleWant to Live. The report draws on the experience of architects across the country and sets out the essential ingredients of success: mixed uses, local identity, a verdant setting, variety of scale and density as well as product and tenure, thoughtful composition, homely detail, care for sustainability and so on. These attributes are simply not deliverable without listening to the people who live in, work in or visit an area. They are also much less likely to come together in the cost-driven standardised processes we have today in which dwellings are laid out individually, without meaningful relationship to one another, in a process aptly referred to as 'plotting'. This may maximise profits, but it fails completely to imbue the enduring sense of place that provides a community with lasting value.



New homes should have a meaningful relationship with each other. Credit: RIBA.

Most of the case studies we have chosen in our report might well be described as having classic but often contemporary good looks. Some are designed in historic styles but here I do want to get across that references to the past are by no means a guarantee of success, in our view, unless the thoroughgoing principles set out above are also adhered to. At RIBA we have done research into the qualities of individual homes that lead to a consumer preference for the 'traditional'. The answer lies in a generosity of space, high ceilings, windows that flood principal rooms with light and detail that adds character. None of these characteristics are unavailable to modern designers and builders, as our exemplars show. We support Oliver Letwin's prescription for curing the meanness that accompanies much speculative housebuilding, in particular speculation that drives inflated land values and the cost driven race for the bottom that results.

So what would we do to create a system that helps us build more of the types of home that people want?

Firstly, more care and concern for design. In addition to our call for skilled designers to be involved with planning and layout, it is clear to us that the homes people want make ingenious use of internal space, include fenestration that floods space with light and afford considered aspect and prospect when viewed from within. Real design skill is required to make the best of these qualities within finite resources.



Homes with classic but contemporary good looks. Credit: RIBA.

Secondly, we need to look at how we assign value to housing. Consumers are let down because our system of valuation. The 'red book' of the Royal Institution of Chartered Surveyors (RICS), takes no account of the very qualities that purchasers want and which often lead them to resort to the second hand market in order to obtain. As long as the qualities that the buying public want are not valued by the industry and its surveyors, it is hard for designers to justify the features that satisfy them.

Next, we simply must provide consumers with better information about the homes they are buying. It has been said that less is made known to purchasers of new homes than is available on the side of their breakfast cereal packet. So those of us who care about delivering what the public wants have been working on research to arrive at a reliable and representative system of home performance labelling. Until we can deliver on the promise of such a system, we will continue to lack the available measures enabling consumers to make the informed choices available to them in just about every other market place.



Less is made known to purchasers of new homes than is available on the side of their breakfast cereal packet. Credit: Michael Newman, Flickr (Creative Commons).

Our politicians also need to examine the policy decisions we've implemented in recent years that are presented to those who want to do better with Hobson's Choice. In a market where a developer can thrive without much incentive to consider real popular preferences in any depth, the choice for my profession is too often between lowering standards to levels we feel are not acceptable, or simply not working. A prime example of the mess we have created is the decision to allow office buildings to be converted into homes without any quality or suitability safeguards. A policy aimed at converting empty offices and revitalising high streets has instead driven the exploitation of some of the most vulnerable in our society. Across England, we've seen tired old offices haphazardly converted into tiny flats aimed at those with few other options: either move your family into a 13 square metre studio apartment next to a busy and polluted road in a block with no insulation and communal space or don't have a home.

In the meantime, there are other measures we can implement to ensure that the public gets what it wants with greater reliability – improving the essential degree of trust in the benefit of new development. Designers and developers should routinely collaborate on post-occupancy evaluation. By the end of my term as president of RIBA there will be a straightforward service-offering that all architects will be able to include in client appointments to obtain consumer feedback. The building industry as a

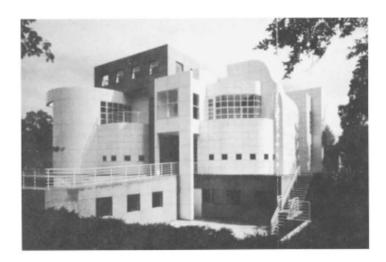
whole is stuck in the dark ages: unable to accurately assess mistakes let alone learn from them. I will make the case that this should be offered as part of the normal service.

So, yes; it's not just architects, but the whole industry who should work together to deliver what the public wants. But we also need politicians and policy makers to be more realistic about the potential for abuse and unintended consequences of new legislation that make this harder to do.

9 What explains the 'design disconnect' between most people and professionals?

by Nicholas Boys Smith

In 1987 a young psychologist was conducting an experiment into how repeated exposure to an image changed perceptions of it. A group of volunteer students were shown photographs of unfamiliar people and buildings. They were asked to rate them in terms of attractiveness. Some of the volunteers were architects and some were not. And as the experiment was ongoing a fascinating finding became clear. While everyone had similar views on which people were attractive, the architecture and non-architecture students had diametrically opposed views on what was or was not an attractive building. Correlations were "low or non-significant". The architecture students' favourite building was everyone else's least favourite and vice versa. The disconnect also got worse with experience. The longer architecture students had been studying, the more they disagreed with the general public on what is an attractive building.⁷



'The consistently least popular of 12 buildings shown to non-architect students proved to be the most and second most popular among two groups of architect students'8

The young psychologist was David Halpern and he is now a highly influential man. He runs the British Cabinet Office Behavioural Insights team (often called the 'Nudge Unit'). Two decades on, he is very clear that

^{7.} Halpern, D. (1995), Mental Health and the Built Environment, pp. 161-2.

Halpern, D. (1995), Mental Health and the Built Environment, p.162.

"architecture and planning does not have an empirical, evidence-based tradition in the sense that ... sciences would understand. There are very few studies that ever go back to look at whether one type of dwelling or another, or one type of office or another, has a systematic impact on how people behave, or feel, or interact with one another."

If he is right, then the process of a professionally (not popularly) derived borough plan, of planning consent and of expert design review, is the very worst way imaginable to build our towns and cities. The very act which confers value on a site (the granting of planning permission) is a process whose key players are, empirically, the very worst judges available of what people want or like in the built environment.

But is he still right? Perhaps more than two decades of "market pressure" since the state largely removed itself from house-building in the UK has obliged the profession to value what their clients (as opposed to their training) appreciate? A glance at the criteria of architectural prizes is not reassuring. Few if any place value on evidence of popularity or provable correlations with wellbeing. Certainly RIBA's prizes specifically demand evidence on sustainability but not on what members of the wider public think. Similarly, in a 2004 study into attitudes to housing conducted for the Joseph Rowntree Foundation, nearly 60 per cent of the public said they disliked flats. Only a little over 20 per cent of "experts" shared that view. Other more recent peer-reviewed surveys have also found that architects fail to recognise that their understanding of good housing may not be shared by residents. They consistently disagree with the general public on matters of good versus bad design and are actually unable to predict the public's real preferences.

To investigate this further, Create Streets conducted an informal poll on social media. We found that the sharp and important distinction between what non-design specialists and design specialists would like to see built is still there: 25 per cent of supporters of the more popular two options worked in planning, architecture or creative arts; 46 per cent of supporters of the less popular two options worked in planning, architecture or creative arts. People are from Mars. Professionals are still from Venus.¹³

- 9. The Psychologist, Vol 24, (2011), 'An interview with David Halpern', pp. 432-4.
- 10. Though it is reassuring to see the August 2015 launch of the RIBA Journal McEwan Award to fete projects 'a clear social benefit, right across society.' This is a step in the right direction.
- 11. Platt, P. Fawcett, W., de Carteret, R. (2004), Housing Futures, p.40.
- Brown, G., Gifford, R. (2001), 'Architects predict lay evaluations of large contemporary buildings: whose conceptual properties?', Journal of Environmental Psychology, 21, pp.93-9. Darke, J. (1984), 'Architects and user requirements in public-sector housing', Environment and Planning B: Planning and Design, 11, pp.389-433.
- 13. Ours is not the only research with this finding. For one study and to see a summary of others see Brown, G., Gifford, R. (2001), 'Architects predict lay evaluations of large contemporary buildings: whose conceptual properties?', Journal of Environmental Psychology, 21, pp.93-9.



Options in Create Streets Pop-up poll¹⁴

The melancholy implication of this is that architectural awards are a good indicator of popularity – but only if you invert them. We are aware of nine architectural or planning prizes awarded to the two least popular options. We are not aware of any architectural or planning awards garnered by the most popular option.¹⁵

The prejudices of too many in the design and planning establishment are not just idle personal preferences. They palpably influence what actually happens. In a 2014 design meeting for a major London site, the "traditional" built form of conventional developments was openly ridiculed and dismissed as unworthy of discussion even though it is what the public most like.¹⁶ Similarly, in a June 2015 meeting of very senior officials and architects at which Create Streets was present, the Director of Housing and Regeneration at an important London borough spoke (without apparent irony) of the "horrid Edwardian streets that most of us live in" and complained of "dreary terraces". He has repeated these views (in a less incendiary fashion) in a public meeting. When a senior and respected decision-maker does not just disagree with the vast majority of the public but is openly contemptuous of their views, it must be time to ask if the whole public procurement and planning prioritisation process needs dramatic rebuilding from the bottom up. Certainly, in public sector design competitions for city-centre development and estate regeneration marks are routinely (in our experience always) awarded very materially for "innovation of design". In at least four cases that we are aware of this was despite the explicit request from councillors that a more conventional, even traditional, design would be more appropriate.

The point is really not to criticise designers for having different views to the general population. It is hardly surprising. The sheer professional experience of thinking about buildings and places over many months and

The poll ran online between 1 April and 22 May 2015.

The second option has not been built so is not able to win awards.

Private information. A member of Create Streets was at the meeting which was for an (ultimately) public sector client.

years is almost bound to encourage some desire for things that look different and new. ("Oh dear, not another...") In the five years since I founded Create Streets, I have even realised that my own personal preferences are evolving in response to the sheer number of buildings and places I work on and research. Places that are weird and novel seem far more attractive than they did five years ago!

Designers' professional training also encourages them to seek for the novel over the familiar. And it simply fails to teach them how to design buildings in the vernacular or traditional formats. There is no architectural school in the UK (or indeed in Europe) fully teaching traditional or vernacular design. And there is arguably only one module (at a stretch two) which teaches classic design. Most architects and planners may not want to encourage traditional or vernacular design. But most could not design it even if they wanted (of course there are very honourable exceptions).

Nor is the point that design innovation is necessarily bad. Clearly it is not. It is often excellent. The vernacular tradition must look forwards as well as back. And innovation of technology, construction efficiency and process is to be assertively encouraged. Britain remains far behind many other countries in its adoption of modern methods of pre-fabricated construction. This should be, can be and indeed is being rectified.

However, innovation of aesthetic (while necessary) needs to be balanced with the familiar. And in at least four cases, public procurement design competitions were being run in contradiction to what had been requested by council leadership. It is hard to conclude that the current system is under effective democratic control.

10 Green and beautiful: the spaces in between

by Julia Mizen

As the Government embarks on its ambitious house building programme, nowhere is the need for beauty and good design more important than in the communal outdoor spaces which link our streets and estates in built up areas. These spaces, often small in area, provide a valuable foil for the pressures of dense urban living. We rely on them for relaxation and escape; a place to congregate with others; or move from one place to another pleasantly. Surveys have repeatedly shown the link between better quality outdoor public spaces and physical and mental health. Conversely, neglected or badly designed outdoor areas can increase stress levels, lead to feelings of isolation and encourage crime.

So what makes an outdoor space successful? What works, and what doesn't – and why? How can outdoor space be used to create community, and do such spaces have to be green in order to be effective?

The classical piazzas which populate Rome demonstrate that plants are not a prerequisite for achieving beautiful outdoor spaces in built up areas: natural paving materials, water features and sympathetic architecture in pleasing proportion can all combine to create intimate (and large) spaces of light and shade, where communities come together to eat, drink and relax.

It was these piazzas which provided the blueprint for London's first private residential square, Covent Garden, in 1631. Designed by Inigo Jones, the square had shops, a church and housing on three sides. It was entirely paved, with the exception of a small tree in the centre, surrounded by wooden benches.



Covent Garden piazza in 1737 by Balthazar Nebot. Credit: Tate via Wikimedia (Creative Commons).

The enduring success of the London garden square today speaks to the age old tradition of building community around a central point — the village green being one of the earliest expressions of this. In London, the garden squares which sprang up in the late 17th century became London's first suburbs. Each square was planned as a self-contained community with a square of grand houses at its heart, a church and a market-place, surrounded by a series of increasingly inexpensive streets.¹⁷

Drawing on the history of an area and linking effectively to its surroundings are vital components of successful place making. The Parisian Promenade Plantée, the world's first elevated park walkway set on and under a derelict 19th century viaduct in the southwest of the city, demonstrates how effective the imaginative reclamation of abandoned local features can be. Some two and a half miles long, and up to 10 metres above street level, the green walkway provides a restful corridor for people to move between different parts of the city, away from traffic and with optimal access to available light. At street level, artisan shops are tucked into the arches. They reflect the old life and provide economic benefits to the community.



Promenade Planteé, Paris. Credit: Mark Bridge via Flickr (Creative Commons).

^{17.} http://www.londongardenstrust.org/history/squares1650.htm

Opened in 1993, the Promenade Plantée provided the inspiration for the High Line in Manhattan, located on a reclaimed section of abandoned New York Central Railroad between West 34th and West 13th Streets. The 1.45 mile long walkway, which was opened in 2009 and has received some 20 million visitors to date, has been designed in accordance with the original rail road, using naturalised planting set among sleepers and embedded in railroad gravel mulch. Portions of the original track have been reused to make loungers for people to sit and take in the views over the city and the Hudson River.

The High Line has had dramatic economic consequences for the area too, with the value of real estate closest to the walkway now more than double the value of properties a block away. However, the increasing gentrification of the area, coupled with the high volume of tourist traffic, has also caused the displacement of many of the original members of the community – an unintended consequence which has led one of the founders of the scheme, himself a local resident, to apologise publicly for failing the very people the scheme was meant to serve.



The High Line, New York. Andreas Komodromos via Flickr (Creative Commons).

The failure of another linear project, London's first 'Garden Bridge', to get off the drawing board demonstrates what can happen when designers seek to impose a scheme on an existing landscape with no appreciation of the area it seeks to occupy. The location of the bridge was on a stretch of the River Thames which was already well served by bridges and the proposal quickly ran into opposition from local residents. They were upset by the scale of the project, the destruction of open views across the river, and the impracticality of absorbing up to seven million new visitors to the area. Poor planning also led to budget overruns, with the cost rising from a projected £60m to more than £200m by the time the idea was abandoned.

Creating successful communal spaces in built up areas where the land value is high and space is at a premium often means working with very small enclosed areas which have little in the way of natural light or scenic views. Recognising the importance of so called 'pocket' parks, the Government

has set aside funding to encourage the reclamation of derelict and neglected spots in London. Some of the results are spectacular. They include London's first floating pocket park in Paddington Basin which features open lawns, raised borders, seating and a separate wildlife island on a series of small interconnected platforms just 730 square meters in area. Further small scale planting schemes are springing up in parts of London led by local green groups and so called 'guerilla gardeners' who want to soften and enhance the streetscape. It is interesting to speculate on future opportunities for the greening of our streets as we start to rely less on the car in town centres and look for less polluting ways of moving about.

The urban allotment is another interesting use of small space which has the power to bring local people together in a common past time, irrespective of class, age and background, in areas where they might otherwise be total strangers. Famously in London, this occurred during the Second World War when public squares were turned over to vegetable growing as part of the "Dig for Victory" campaign, but the same effect can still be seen in modern war-torn areas today. The Syrian architect Marwa Al-Sabouni relates how in her home town of Homs, allotments are springing up on patches of bomb ravaged land, as the local population seeks ways of coming together to heal.

The popularity of urban allotments is growing too. In New York, there are now more than 600 "community gardens" officially administered by the Parks Department.¹⁸ On the lower East side in Manhattan alone, more than 39 small community gardens are packed amongst rows of tenement buildings and volunteer residents pay a membership fee to maintain the gardens for others to visit and relax in. In the UK, the average number of people on a waiting list for an allotment is 59, with around 4,300 waiting for an allotment in London alone.¹⁹

Creating community when the community is constantly changing, and increasingly drawn from mixed social and cultural backgrounds, is one of the biggest challenges faced by architects, designers and planners. An explosion of poorly designed building in London in the 1960s and 1970s, when planning regulations were less strict than today, has left a legacy of crumbling high rise buildings clustered around soulless pockets of grass or concrete.

The Clapham Park Estate in the London Borough of Lambeth is one such area – where decades of poor maintenance has helped cause a fractured community and a high local crime rate. The redevelopment, begun in 2008, is ambitious: once completed in 2028, the estate will provide more than 3,000 flats for mixed tenant use – double the number previously in existence. The challenge for the Clapham Park designers is to create viable outdoor spaces which will unite the different tenant groups, as well as serve the functional needs of linking the estate with nearby shops and public transport facilities.

A recent survey²⁰ which asked people to identify what they found the most and least beautiful in the urban landscape revealed that contained spaces which are too closed off, or conversely too flat, open and featureless, were

https://www.nytimes.com/2016/01/23/ nyregion/community-gardens-imperiled-by-newyorksaffordable-housing-plans.html

^{19.} https://www.independent.co.uk/life-style/allotment-facts-5323699.html

The Royal Society 19 July 2017 "Using deep learning to quantify the beauty of outdoor places" http://rsos. royalsocietypublishing.org/content/4/7/170170

amongst the least popular. On the Clapham Park Estate, the small hidden communal areas which previously existed in corners created by the tower blocks (and which were a haven for drug dealers) have been removed, and larger areas of flat grass have been broken up into smaller more intimate areas using trees. To enable residents to access nearby amenities, designers propose a landscaped pathway broken up by planting, comfortable seating made from sustainable materials and a mixture of different types of natural paving. Hard and soft materials from sustainable sources have been selected to endure and a maintenance plan aims to ensure that the new landscape is not neglected. Time will tell if the redesigned landscape will achieve the social and functional needs it aims for.

The difficulties of establishing new cohesive communities in urban settings are amplified as the scale of a redevelopment increases. One of Europe's largest ever regeneration projects is the Queen Elizabeth Olympic Park in the London Borough of Newham which cost £12billion and covers an area of more than 568 acres. Located on an old brownfield site in a part of London with some of the highest unemployment and premature death rates in the country, planners aimed to bring long lasting economic value to the area through the creation of 40,000 jobs set in extensive sustainable park lands.



Greenery poking out in the Queen Elizabeth Olympic Park, London. Credit: Martin Pettitt via Flickr (Creative Commons).

Five new residential neighbourhoods, complete with new schools, health centres, world class sporting facilities, a giant shopping centre and other public buildings have been set into vast areas of tree dotted grassland, waterways, wetlands and wild meadows. The redevelopment is not yet complete and the newly created landscape will take time to mature, but there is nonetheless a strong sense of a manufactured, homogenised feeling to the landscape which has left some residents feeling isolated and disconnected from their surroundings.

Designers involved in urban regeneration projects must contend with the task of trying to create landscapes around existing buildings but this challenge is removed when it comes to designing garden cities and new towns. In these instances, planners are able to take the existing landscape as a starting point and design the buildings around it.

The proposed Fawley Waterside "intelligent" new town on the outskirts

of Southampton on the site of an old power station aims to create a self-sustaining community where the beauty of the New Forest on one side, and the Solent on the other, is at the core of the design. A key part of the concept is to blend the edges of the community into the landscape: livestock will graze on land which extends into the streets on the southern edge of the town, and a marina and boat-building facility will give access to the waterways of the Solent. The 1,000-acre landscape management plan is the largest expansion of the New Forest landscape since the Normans, and encourages residents to walk there rather than drive. The land is intended to be productive rather than simply ornamental, with the creation of new areas of saltmarsh to attract wildlife, and a series of natural recreational walkways and wildlife ponds created on the site of an old gravel quarry. In addition, savings in transport and distribution will fund the cultivation of food to be sold onto residents at affordable prices. In the centre of the conurbation, parts of the old power station will be retained as a link with the old site.



Fawley Riverside proposed development, near Southampton. Credit: Fawley Waterside.

The project is just one of an increasing number of proposals from smaller, innovative designers who hope to build in a new way. Rooted in the landscape within which they are sited, and built to last using sustainable local materials, such projects are welcomed by nearby communities who see the economic and lifestyle benefits. In the case of Fawley Waterside, an astonishing 80 per cent of local residents who responded to the public consultation were in favour. Some even said they wanted to relocate to the new settlement once it is completed.

For too many people new development is seen as the end of a community, not the beginning. Understanding the local vernacular and building sympathetically is vital to delivering strong neighbourhoods. Each new home should add to a sense of community, not undermine it. In recent polling conducted for Policy Exchange²¹, 84 per cent of respondents directly

^{21.} Online survey of 5,000 respondents conducted by Deltapoll, May 2018

linked happiness with well designed places. The Government's recent announcement of a new Building Better, Building Beautiful Commission to put good design and community engagement at the heart of new developments comes at a critical time when we are embarking on a major expansion of housing supply. The lesson so far is that popular consent is a far more contentious issue than it should be. We all have an interest in getting this right.

Developers, housing associations, architects and planners all have a role to play. However, success in delivering this agenda will also depend on creating the right conditions for smaller developers, better able to attune to local needs and often more flexible in their thinking, to prosper amidst the big developers who currently dominate the scene. We can also draw inspiration from the best thinking in other countries which demonstrates that good design and style comes in many different forms, and is particularly true of the space between buildings.

11 Architecture and the public good

by Dr Demetri Porphyrios

Our home is where we live. It is the place where our friends are, where our kids go to school and where our local shops, community green and meeting places are. Our home is always anchored to our neighbourhood. That is why when we leave our neighbourhood, we don't just lose our home, we lose also our physical and social network; in other words we lose our public realm.

What people want when they buy a house, is a functional, well-built house with good materials and detailing and close to services. We call beautiful those buildings that are suited to purpose, are well-proportioned, have a measure of propriety, and are set in neighbourhoods that have physical and social support infrastructure. And yet, it is baffling to hear these days that good design is exclusively based on novelty and individualism.

Since the Fifties and Sixties, with an emphasis on object-buildings and contempt for civility, we have thrown our towns and cities into disarray, undermining our everyday lives. Our buildings and cities have created havoc by introducing and encouraging:

- universal urban sprawl,
- separation of uses,
- mega-structural scale,
- speedy obsolescence and ephemeral construction,
- senseless technological gadgetry and unfriendly neighbours,
- history as crime,
- the destruction of the public realm, and
- urban alienation and confusion.



The Modern City. Credit for image of Robin Hood Gardens, top right: Claudio Divizia via Shutterstock. Others: public domain.

Over the years, in my books, teaching and practice, I have always maintained that, despite the vagaries of time, there are continuities and common-sense principles in the design of buildings, neighbourhoods and cities.

We only have to look at the history of human cities. The numerous cities of the world bear witness to common human proportion and measure – whatever their stylistic language is that gives them their unique character.

The Human City is:

- the city of neighbourhoods that have commensurate physical and social support infrastructure,
- the city whose uses are not zoned but are mixed and freely distributed in urban blocks,
- the city whose public spaces of streets, squares, greens, promenades and parks comprise the public realm of its people,
- the city whose character derives from human scale, proportion, commensurate measure and propriety,
- the city whose constructional systems give rise to tectonic culture,
- the city whose building systems have a long life and are robust and sustainable,
- Finally, the Human City is legible, thanks to the narrative of its figure-ground public spaces, as for example, the street, the green, the court and the square.



The Human City. Credit: author.

The story of cities has been the story of endless innovation. But the new arises always out of necessity and has been the result of a process of transmission of knowledge and merit. Ultimately, the criterion in the design of neighbourhoods and cities has been, and should be, the 'public good' of the inhabitants.

This is why we say that the city is not something that can be engineered by any form of technique and by any administration. The idea that we can engineer cities and neighbourhoods by simply applying any technical know-how has been the typical response to housing and urbanism and, unfortunately, has proven disastrous. Over the last 70 years, or so, the failures of housing in the western world have been, most often, due to our decision to restrict design to the sole horizon of technique at the expense of beauty and common sense practical reason.

It is time that we defend practical reason and beauty against the domination of universal technique. For, if we take practical reason and beauty seriously, they lead us beyond the stylistic sentimentalities of historicism, post-modernism and modernism. The future depends neither on abstract concepts of development and progress, nor on the random play of chance. It depends on our skill in using our human gifts for beauty, practical reason and common sense.

12 Beauty and a romantic left

by Jon Cruddas MP

Much has been written about the politics of John McDonnell, the Shadow Chancellor, especially his embrace of Marxism. However, most of this writing is rather crude; little of it studies the nature of the actual Marxism he references and seeks to cultivate.

In a revealing recent BBC interview with Nick Robinson, McDonnell discusses his quest to rehabilitate Marxism. The emphasis is less on the traditional, authoritarian determinism of the Second International and the cold utilitarian left traditions he himself is often associated with. Instead he speaks of his admiration for Robert Owen, together with a range of writers who have historically sought to embrace more democratic, creative traditions that critique capitalist society. Specifically, he talks about how he remains inspired by "William Morris and that concept of beauty, of Ruskin and others." It suggests a different, hidden side to his political character; one anchored within a forgotten, romantic left tradition.

McDonnell has consistently sought to operationalise a renewed left aesthetic – especially when discussing questions of land development and urban planning. For example, at a breakfast talk in 2016, he again self-identified as a socialist in the William Morris tradition. One who assumed "people must like the environment they live in", and that it was possible to make the built environment both more "beautiful and enjoyable" – a far cry from much modern left rationalism. It might suggest a Shadow Chancellor less concerned with fiscal transfers and instead with deeper questions of power, democracy, creativity, beauty and human self-realisation. So what is this alternative left tradition?

After the Second World War, from outside the Labour Party, elements of the so called 'New Left' sought to focus on William Morris as part of a quest to rediscover a unique English socialist politics. One that owed a profound debt to English romanticism; anti scientific and artistic in orientation.

For example, much of EP Thompson's work was part of a distinct political project within the Communist Party to identify a specific English radicalism in the character of Morris himself and the wider emerging working class.



William Morris described Bibury in the Cotswolds as "the most beautiful village in England". Credit: Karen Roe, Flickr (Creative Commons).

Alongside Thompson, Raymond Williams, particularly in Culture and Society, defined a political, artistic and cultural tradition from John Ruskin, through Morris, to the modern New Left. Starting with Ruskin, he focused on his resistance to laissez-faire society through artistic criticism where "the art of any country is the exponent of its social and political virtues... the exponent of its ethical life". Here what we value is taken out of the realm of political economy – of supply and demand, and calculus – and instead relates to the virtue of the labour itself – seen as the "joyful and right exertion of perfect life in man".

With Ruskin, the notions of wealth and value, and indeed labour, are used to attack 19th century liberalism for its cold utilitarianism, and instead promote a society governed by "what is good for men, raising them and making them happy". The search is to live a virtuous life and become wiser, compassionate, righteous, creative; what it is to be "freeborn" – in the sense of Thompson's work on the creation of the English working class.

What is of value is less the notion of "exchange value" contained in both orthodox Marxist and liberal economics, but a concern for human creativity and self-realisation. Morris was the critical intellectual link, as this body of socialist thought is attached to the political formation of the working class in the late 19th century. This turbulent period of class struggle occurs alongside a "neo-classical" economic revolution, removing value into the scientific realm of individual rational preferences. The socialism of Morris was grounded in an alternative emancipatory conception of human labour and creativity. Art constitutes a politics of resistance to life being commodified. It is a continuous struggle, not just against capitalism — given its alienating effects on human creativity — but also left-wing utilitarianism and Fabianism.



Robin Hood Gardens in Poplar, London (now demolished) – left-wing utilitarianism in building form. Credit: Steve Cadman, Flickr (Creative Commons).

Socialist change is not simply political and economic change – the "machinery" of socialism, as Morris called it – but heightened consciousness that aims to realise a person's true capacities. In the cauldron of 1880s England it was a politics built around the search for an authentic human life. Within this period of change and economic rupture, socialist responses divided between romantic and rational; ethical and economic. This divide remains the classic fault line within the history of both socialism and Marxism; between economic and ethical traditions. Arguably, Morris remains the most significant English socialist advocate of the latter tradition.

This basic division informed the actual creation of the Labour Party itself. The three great prophets of Labour and the ILP: Keir Hardie, Ramsay MacDonald and George Lansbury – the "apostles of the old faith", to quote the historian Ken Morgan – were all driven by a profound sense of human fellowship forged alongside Morris in the 1880s.



Memorial of William Morris on a cottage built by his wife Jane Morris in Kelmscott, Gloucestershire. Credit: Rictor Norton & David Allen, Flickr (Creative Commons).

All three were informed by a distinct Labour tradition that often referenced Carlyle's "Condition of England Question" in his essay on Chartism in 1839. His raging against the inhumanity of industrialisation — "the condition of the great body of people in a country is the condition of the country itself" — influenced the social novels of Gaskell, Dickens, Disraeli's Sybil, or The Two Nations, and Ruskin. It also inspired an English socialist modernity of virtue and sensibility. Morris stands as its greatest exponent and it was given organisational form within the ILP and Labour by Hardie, MacDonald and Lansbury. It lay deep within the personality of Attlee and the texture of his great transformative government. Today, intermittently, it has reappeared with Corbyn; it is what McDonnell speaks of.

Yet in general this tradition has been removed from the centre of Labour thinking. Gradually through the 1930s, the planners, scientists, organisers and the economists – Dalton, Morrison, Bevin, Jay, Gaitskell and Wilson – won out. Mechanistic, centralising distributional models of justice came to dominate the Labour leadership, its thinking informed by often rigid utilitarian methods best captured in the history of Fabianism.

The mistake of both Sidney and Beatrice Webb, according to Morris, was to "overestimate the importance of the mechanism of a system of society apart from the end towards which it may be used". Over time, within the Labour tradition, the question of human virtue became at best a residual concern.

The romantics and prophets lost. From time to time a few crept through. Bevan with his focus on the aesthetic of council house production and his "emotional concern for human life". Deeply artistic, he held a libertarian

belief in the capacity of all humans to flourish that occasionally made socialism sing; the "sensual puritan" captured by Michael Foot. Foot himself retained links to the tradition.

John McDonnell might be quietly seeking to rehabilitate this approach to socialism. Inspired by William Morris, it is one concerned with the sense of a creative life we could all live: our shared humanity that could inspire public policy and our approach to the built environment. It talks of what we have lost as we relentlessly commodify our lives and our relationships, our children, our culture.

As politics has become increasingly instrumental and economistic, it might help us retrieve a language around what it is to live a good life and provide a very different texture to our public conversation given how neoliberal globalisation and the modern left utilitarianism detach economic and political power from a shared environment; from locality, tradition and interpersonal relationships.

13 Building beautiful: how much a priority is this for developers?

by Roger Madelin CBE

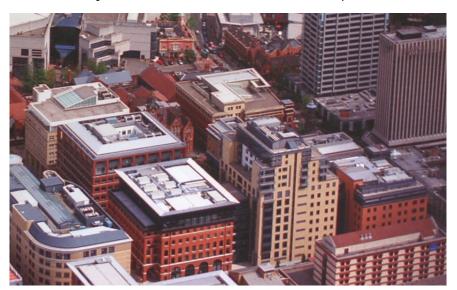
Having had the privilege of holding senior and/or leading positions in major development businesses for over three decades, I can state unequivocally that the 'beauty' of the developments that I have been involved with has always been at the top of my (and my senior colleagues') agenda for every project. Over my career, the majority of the developments I've worked on have provided commercial city centre space, but providing more than 160 homes in Birmingham, a similar number in Manchester, 1600 at King's Cross and up to 3000 at Canada Water over the next few years has been and will continue to be a real privilege and an increasing responsibility.

Over those three decades, I have tried on several occasions to be involved in the development and delivery of major new settlements but for various reasons - mainly the lack of political certainty and/or the lack of a wider vision supporting an investment of many years of one's life and many hundreds of millions of pounds - I have (so far) failed to do so.

The development business is a customer service industry and we absolutely operate on the basis that our customers always have a choice. (Sometimes of course that choice may be limited!) Our product must obviously provide for the basic functional need and meet the market demand, but we do try and appeal to the emotional need also. What a building looks like, the environment in which it is set, safety, security, amenity, access to employment, health, education, shopping and sport and entertainment, how the area is looked after, what is around it, your neighbours, how you get to it and what you 'feel' about occupying it are very important to us and we believe to our customers as well. All of these factors contribute to 'beauty'.

As the development director and then the CEO of Argent Group PLC, I am pleased that projects such as Brindleyplace in Birmingham and King's Cross have received positive comments regarding the design of the individual buildings. But what is, in my view, more important is that both projects have provided major new 'frameworks' of streets, spaces, squares and other public realm and they are located in accessible parts of the city. It is public realm which sets the pattern for the initial development and it is this template setting – the routes, the connections, the vistas, the way finding, the mix of uses and the landscape – that continue to guide and inform the design, the setting and often the location of the initial new buildings and those to follow over the coming decades and centuries that will inevitably occur. Done well the new streets and publics spaces that we

create will be in place for hundreds if not thousands of years.



Brindleyplace in 2006. Credit: Academy of Urbanism, Flickr (Creative Commons).

A Central Television journalist in 1998 interviewed 'a local Brummie' in Brindleyplace Square and asked what he thought of Brindleyplace and the architecture. He said that he was proud for his city that the new development had occurred and that he brought his friends and family there when they visited from around the UK to show them what a lovely place Birmingham was. He was then asked what he thought of the architecture. He said 'I don't know, I have never noticed it'! He was clearly comfortable and proud of just 'being there', being in the spaces between the buildings. The buildings around him (which we had spent many years and hundreds of millions of pounds creating) were clearly unobtrusive and 'comfortable' enough for him not to notice!

Brindleyplace and King's Cross are major city centre mixed use projects and my new role at British Land leading on the 53-acre Canada Water Development is 'more of the same' (but with up to 3000 new homes). While these projects quite rightly deserve much scrutiny and debate, it is the new lower density housing estates and how we might improve them that I suspect were more in the minds of those attending the recent Policy Exchange conference – but are there lessons to share?



Granary Square fountains, King's Cross - after regeneration. Credit: BEARTOMCAT, Flickr (Creative Commons).

What do we mean by beauty? What are the developments that we hold with high regard? Examples of successful development include major parts of Bath, many parts of central and even outer London and our other cities, Bourneville, Cotswold and market towns generally. Make your own list and I suspect that all will be over 70 years old if not considerably older. Why are these towns and places so loved? How did they come about? Is it just that we get used to them and love them like an old coat or pair of shoes? All or most were no doubt before the 1947 Town and Country Planning Act so it would be easy to say that the planning system has somehow made things worse. Or maybe developments designed over recent decades to accommodate the motor car have just not been as good or as well received?

All of our favourite places are no doubt located where transport other than the car should work. Whether they are at valley intersections, along rivers, at harbours, or at intersections of coaching routes and railways, our favourite developments are located to serve the market and commerce and large enough to sustain a mix of uses including the social and public buildings. (The bad or not so good developments that came before 1947, of which there were many, are of course not in our minds.)

There is no doubt to me that the planning and political system, the allocation of development land and the apparent necessity to accommodate the car is often stacked against the facilitation of great and 'beautiful' new developments. Some, however, have still occurred and the car is not banned! The planning system and dealing with cars can work with the right shared vision, the right resources, the right interpretation of the rules of the car and deliveries; and, of course, with strong, confident, informed leadership from the public sector, politicians and from the developer.

The concern, often very justified, of local people against new development is usually founded on their current concerns regarding transport and social infrastructure provisions. How can any new development happen when the roads are already full, traffic is dangerous and polluting, the good schools are full, the hospitals are full and so on?

The new schools, health and recreation facilities, and transport improvements must happen before or at least alongside development, or resistance will continue and piecemeal, low quality, small scale, low ambition development will continue. Public money is of course much in demand so how can new developments fund their own infrastructure to support development and maybe more to improve on some of the existing concerns? Despite the perception that development is a licence to make money it is one of the most risky businesses. If it was such a guaranteed way of making money all pension funds and individuals would invest their life savings in development businesses.

It is risky and when the initial base land cost is very high there is obviously so much less potentially 'in the pot' to spend and the risk is higher. A tendency or a necessity to cut costs then prevails.

Much land released for housing has been fought over often for decades. Every fight adds to the cost. The land eventually allocated is often in the least politically damaging place and often not in the most appropriate location. Clear national and regional planning are in my mind essential to then allow a more local response to respond constructively to a land allocation not to spend years fighting against it.

Often inappropriate land infilling along side a major road or motorway is allocated. Land is then often only released in small parcels. How can beauty arise when the raw material is so inappropriate?

The landowner, often a farmer, may see his land value rise from £10,000 per acre to hundreds of thousands of pounds. While many will argue that beauty does not have to cost more money - and indeed well thought through contextual designed buildings do not have to cost more - developers are more likely to battle for decades to get a land allocation for 15,000 homes where serious new infrastructure investment might be more easily justified. Land released for a few hundred homes after a hard costly battle is hardly likely to have the money available to properly sort out the new infrastructure let alone any existing issues. A few kerbs get

rearranged and maybe a new classroom gets built; this piecemeal make do and mend is not in anyone's long term interest.

Starting with the knowledge that an unchallengeable development plan is in place and with a lower unit land cost does help and means that long term investment can take place.

When and if high returns are made, mechanisms to share in the upside can be put in place and community funds can be set up to share in success. Quality and long term thinking pays.

Strategic land allocation and transport provision, with the public sector supporting compulsory purchase, land assembly and acquisition, as may be possible for the Oxford to Cambridge belt should allow development to be planned properly and development partners selected on quality and beauty.

Long term phased projects with major long term investors by their nature should produce better quality and design. No sane investor in for the long term will want to scrimp on quality or design on the first phase as it sets the tone and value for the rest. Up front infrastructure investment has to be paid back in the later phases so the first phase had better be good to attract the interest in the second phase and so on.

In conclusion, here are some thoughts as to how to provide the best chance for the beauty and the quality of design to get the top billing:

- 1. Regional and local planning policies need to set out their aspirations for quality of buildings and place in clear terms with examples.
- 2. Developers need to show a strong commitment to quality and to build a strong consensus as to what that means.
- 3. Allocation, assembly and acquisition of development land in the right place needs to be at the lowest entry cost. Up front excessive 'taxation' of development before returns are made is detrimental to delivery and quality. Public funding of subsidised 'affordable' housing needs a clear national solution.
- 4. Compulsory purchase powers to assemble meaningful opportunities with a clear strategic vision should be used more often.
- 5. Planning of and commitment to deliver new or enhanced existing social and physical infrastructure is required.
- 6. Design of streets, cycle ways, pathways, other connections, public spaces, parking, and other transport systems using existing references that we know work should be used not just in accordance with the latest Highway Standards manual. We should use UK and international examples to show what can work and what is liked.
- 7. Use the context and history of the place in which the development opportunity is set. Local materials, building methods and street patterns are probably much loved and can inform new developments that are embedded in the existing place.
- 8. Architecture can be contemporary and innovative using new technologies but still be contextual. It should evolve from a place not try and create a new 'anywhere' place. Everyplace has its story and will be much loved by someone!

- 9. Design buildings that work and that you would want to live in. Encourage all developers and planners to stay in the building that they deliver for at least a night.
- 10. Learn from some of the great projects happening around Europe and the UK.
- 11. Involve National Design Review panels to set higher aspirations for design and place.
- 12. Embrace and enjoy an open trusting dialogue with planners and local politicians.

14 What do people like about old architectural styles and how can they be incorporated into contemporary designs?

by Bruce Buckland

Architecture as a discipline and a profession is in trouble. The reasons for this are as broad as they are deep, but here I would like to focus specifically on stylistic preference as it relates to beauty.

As an architect, to even attempt to have a conversation about beauty is to be ostracised, mocked, laughed at, hounded, pilloried and pushed to the architectural establishment's bleak and isolated fringes. There you can nurse your festering carbuncles into fruition and foist them on the world with minimal attention and absolutely zero peer acknowledgement.

The trouble is though, that the public don't seem to agree with mainstream architectural opinion when it comes to beauty. People really like beautiful buildings. Tourist boards know this very well. The Sagrada Familia, the Taj Mahal, the Palace of Versailles, St Paul's Cathedral, the Cotswold villages, the cities of Amsterdam, Venice, Bath, and Bruges — the list goes on. But why these and not others? What is it about these places that makes people flock to them? Why do they consistently feature in the '50 most beautiful places to see before you die' lists scattered across the internet?

The usual riposte in this debate is that beauty is subjective, and most people just have 'bad' taste. Or that sure, many old buildings are beautiful, but why would we do things the same way now? We've moved on, it is argued. Times have changed. This is the modern world.

But have things moved on? Or are there deeper factors at play here?

The central problem we have is that architecture is still considered an art, not a science. It is therefore seen as immune from the usual rigorous peer-reviewed objectivity-seeking intellectual standards that form the foundations of mainstream academia. The idea that architecture is more art than science is demonstrably false, but it requires science to prove this point. Unfortunately, because of this bias towards the artistic over the scientific in architectural education, the awareness or interest of architects in any scientific literature on perceptual psychology, evolutionary psychology and neuroaesthetics is virtually zero.

What this means is that architecture develops more along the lines of stylistic whim or fashion, rather than by objective measure and feedback. This is not to diminish the artistic and creative elements, which have indispensable roles to play within architecture, not least in pushing the

boundaries of what is possible. But they are not measures by which quality or beauty can be judged.

Is it really about style?

To return to the title question: 'what do people like about old architectural styles and how can they be incorporated into contemporary designs?' This question contains two major assumptions which should not be left unchallenged. Firstly, do people really prefer old architectural styles? And secondly, is it the styles they prefer or are there other variables at play?

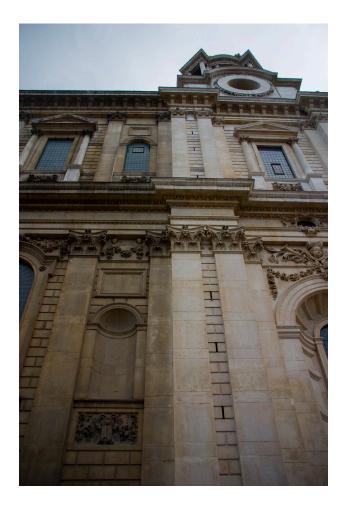
I could easily speculate on the relative weight of influence of each confounding variable here. But the only way to really understand the answers to these questions would be through meticulous psychological or neurobiological studies that sufficiently measured and controlled for enough variables such that reliable conclusions could be drawn based on the data. In other words, the normal scientific process.

This is precisely what is lacking in architecture, and what has always been lacking. Architecture is mostly about psychological manipulation, about making people feel and behave in a certain way based on their surroundings. But what use is that if you don't understand the mechanisms by which these feelings and behaviours come about? What is it that people like about old architectural styles? It's simply impossible to say without data.

For the sake of more immediate progress though, I will offer some of my own speculations as to what might be the underlying causalities behind people's apparent preference for historical architectural styles. The key word here being 'apparent'.

Variable 1: Age/History

There is a plethora of emotions that certain buildings can evoke. Some proportion of this emotion however may be linked not to the architectural quality of the building itself, but to its historical associations. To disentangle this particular confounding variable would require comparison between buildings of equal age and historical association, but of different style. Perhaps a good way of thinking about this is the following: consider two identical neo-classical country houses. They are alike in every way. One was built in 1790. The other was built in 2015. How do your feelings differ towards each of them? It is also impossible to disentangle age from historical context, meaning this may be the most difficult of all the variables to control for.



The difference before and after cleaning St. Paul's Cathedral, London. Credit: vuhlser, Flickr (Creative Commons).

Additionally, age brings with it weathering, and it may well be the case that greater weathering induces greater levels of emotional association, perhaps from a feeling that a building is more connected or embedded in its place, or perhaps from the effects the weathering has on the harmony of the building's patina with that of its neighbours. For example, there is always a certain strangeness about seeing new or cleaned masonry on historic buildings. It somehow seems less authentic, even though it looks like the building would have done when first constructed.

Variable 2: Materiality

Further to the effects of weathering and patina, the choice of material itself may well have a significant effect. Historical architectural styles tend to use stone, brick and timber, whilst more contemporary styles more often use concrete, glass, render and panelled façade systems. To control for materiality therefore would require comparing contemporary buildings with historical ones that were of the same materiality, at least externally.





Left: Fibre cement cladding on a residential block in London. Credit: Steve Cadman, Flickr (Creative Commons). Right: The Bloomberg European HQ (Foster + Partners, 2018) uses cladding systems but with natural materials such as stone and wood. Credit: ACME, Flickr (Creative Commons).

Variable 3: Visual weight and structure

Related to materiality is the idea that people can perceive the structural mechanisms by which a building stands. Contemporary and especially modernist architecture often includes 'floating' cantilevers for example, which could be considered to run contrary to our instinctual perception of physics. Historical buildings however are more often constructed of structural masonry, which necessarily lends them a greater visual weight, which may ease the perceptual transition from the relative 'lightness' of a building to the 'weight' and solidity of the ground. Many modern buildings deliberately emphasise the distinction between the ground and the building by use of pilotis and attempts at blurring the ground level transition between inside and out.





Left: The Robie House (Frank Lloyd Wright, 1910) has a broad masonry base that visually as well as physically grounds the building. Credit: Teemu08 via Wikimedia (Creative Commons). Right: Villa Savoye (Le Corbusier, 1931) is one of the first buildings to use pilotis, visually disconnecting it from the ground. Credit: Valueyou via Wikimedia (Creative Commons).

Variable 4: Scale

This is a very easy variable to control for, so I suspect the effect is minimal. One can also point to examples such as Chicago, where large scale buildings nonetheless are often considered beautiful. Scale in and of itself I suspect is not a confounder with regards to style. It may be that different styles affect the perception of scale and street proximity differently, which may have an effect on beauty.

Going from the individual building level to the urban realm, however, can uncover where scale exerts its primary influence. At the urban level coherence of scale within set parameters may well lend a given urban environment a greater sense of harmony, which additionally may contribute to its perceived beauty.





Left: Accordia, Cambridge (Alison Brooks, 2006), a very popular and widely admired development. Credit: John Lord, Flickr (Creative Commons). Right: A typical mews, Kensington, London. Credit: Nick Garrod, Flickr (Creative Commons).

Variable 5: Formal and visual complexity (ornament)

This is, in my opinion, the most important single contributing factor to beauty. It is also the one most closely related to style. There are a great many reasons why ornament is the most significant characteristic distinguishing historical styles from contemporary styles, and why it is so important in affecting psychological reaction to the built environment. In broader terms though, what are they key points?

To begin with you can look at precedents. Almost all of what are widely regarded the world's most beautiful buildings are highly ornamented. Indeed of the top 100 'Most Beautiful Buildings in the World' on crowd-voting site Ranker²², 95 per cent are moderately or highly ornamented. The highest ranking non-ornamented building is the Sydney Opera House which sits at number 35, not-so-closely followed by the Empire State Building at number 53.

The top 5 are:

- 1 Taj Mahal
- 2 Neuschwanstein Castle
- 3 Versailles
- 4 Milan Cathedral
- 5 Hungarian Parliament Building

^{22.} https://www.ranker.com/crowdranked-list/the-most-beautiful-buildings-around-the-world





Left. Taj Mahal (Ustad Ahmad Lahauri, 1653). Credit: Yann via Wikimedia (Creative Commons). Right: Hungarian Parliament Building (Imre Steindl, 1904. Credit: César González Palomo, Flickr (Creative Commons).

So why do people like ornamented buildings so much? Well again, it would take detailed research to establish this definitively, but my own thesis is based around one fundamental reason: it's because of maths. I would suggest that ornament can be understood as a direct reflection of the complexity of underlying mathematical structures and self-similar patterns that cross multiple scales to possibly infinite orders of magnitude. The old trope about the golden section is not so much about the ratio itself, but about the self-similarity of the scaling patterns created by that ratio. For those interested, I have set out these various reasons and their complexities in my paper The New Sympathy.²³ Let me be clear, this is just my own theoretical framework. To validate this would take a great many detailed scientific studies to build up a sufficient evidence base, which would all need to be peer reviewed and be subject to intense scientific scrutiny and competent causal and statistical modelling.

Unfortunately, architecture is not sufficiently scientific to undertake such work. Institutions such as the Building Research Establishment (BRE) have done a fantastic job of investigating the environmental and technical side of building and construction, and the Journal of Environmental Psychology²⁴ has published a number of interesting studies²⁵, but we have still barely scratched the surface of what is needed.

Until this happens we will make little meaningful progress in understanding what constitutes beautiful architecture. Architectural beauty is no more subjective than anatomical beauty (which definitely isn't)²⁶, and it is only through rigorous scientific experimentation that any notion of objective standards of beauty might be reached. Anyone telling you one architectural style is more beautiful than another is guilty of the same offence. Arguments must be backed up with evidence, and as of yet, that evidence is very lacking indeed.

So what do people like about old architectural styles? Well frankly, no one knows for sure yet, so before we start promoting one style or another, let's do the research and find out.

^{23.} https://brucebuckland.academia.edu/research

^{24.} https://www.journals.elsevier.com/journal-ofenvironmental-psychology/

https://www.sciencedirect.com/science/article/abs/ pii/S0272494414001030

https://www.sciencedirect.com/science/article/pii/ \$1090513809000889

15 Can beautiful homes be built in a factory?

by Francis Terry

The British housebuilding industry is a very odd one. It is oligopolistic. It operates in an environment heavily constrained by our unusual planning system. And it is made up not just of private companies but also local authorities and not-for-profit housing associations. Yet perhaps the oddest aspect of all is the total lack of competition over the final product — the home that is eventually put on to the market. As stated in a 2004 Review of Housing Supply by the economist Kate Barker, "house builders do not have to deliver a good product or high levels of customer service to win market share." New homes are "delivered in a way which largely accommodates the constraints of producers". Rather than competing on consumer preference and product innovation, higher rates of productivity are instead sought at the point of land purchase.

This is a depressing state of affairs. But there are signs that things are now changing. As the demand for new homes increases and a large proportion of the construction workforce either retires or heads home after Brexit, the industry is being forced to innovate. There are simply not enough workers to build the homes the country needs. In the words of Mark Farmer, a consultant who led a review commissioned by the Government on the construction industry's labour model, the industry must "modernise or die".

The most interesting part of this forced innovation is the possibility that more homes will be built in factories as opposed to on building sites. Both housebuilders and the Government are investing significant amounts of money in what is often called off-site construction, modular construction or precision manufacturing. Some people may also recognise it more readily as 'prefab' housing.

Beyond imminent workforce pressures, there are a number of good reasons for finding new ways to build houses away from building sites:

- 1. Building sites must deal with unpredictable weather, including rain, wind, frost or even snow. This slows and sometimes halts production. In a factory, the temperature can be controlled and working inside eliminates the problem of rain, snow and wind.
- 2. Building sites are inherently dangerous.
- 3. Less time on site means less disruption for the local community caused by noise, dust and extra local traffic.
- 4. Workers in a factory would not need to spend time travelling to different places and they could work in comfort. This would help

- to retain workers in the construction industry.
- 5. Quality control is easier to monitor in a factory rather than on a building site.

Each of these factors makes off-site construction methods quicker, more reliable and therefore cheaper than traditional building methods. nHouse, a UK producer of modular homes, claims it can build a house in 20 days in the factory which can then be erected on site in a matter of hours.

We are not in a hypothetical realm here: building houses in factories is already done in vast quantities. Predictably, Japan and Germany are leading the way, but the UK is beginning to embrace this new trend. As well as nHouse, major housebuilders like Berkeley Homes are looking to build homes off-site. Legal and General, the pension fund, has also launched a housing factory.

As an architect with traditional tastes in design and style, you might expect me to view the shift towards off-site construction with trepidation. Surely traditional architecture needs traditional build methods? This could not be further from the truth.

Traditionalists should have no fear because prefabrication has been with us since classical times. There is substantial evidence that the Romans had standard column sizes which were used extensively throughout the empire. But a more critical question to ask is, can these prefabricated houses be beautiful? Beautiful boats, cars, bicycles, furniture, clothes, shoes, or whatever you care to mention, can be made in factories, and so why not houses? It can certainly be done in timber – the Americans have been building attractive prefabricated timber houses for years. To do this using heavy materials like brick is more complex but I believe quite possible. I have seen vast brick and stone wall panels for office buildings – see the picture below – being made offsite so there is no reason why it could not be done for housing.



Brick and stone wall panels constructed off-site. Credit: author.

There is an urgent gravity to this question of how homes built in a factory can be beautiful. This is because in order to get the volume of new homes needed, Policy Exchange's research shows that houses must be popular and tap into what most people find beautiful. The modernist style can be very beautiful, but it is not for everyone and many modern-style buildings fall into the 'marmite' category. A popular house needs to be more general in its appeal. For this I would suggest that designing in the traditional style rather than a modern one is the answer. Every estate agent knows that it is far easier to sell a traditional style house than a modern house, Georgian properties being the most popular.

This is backed up by the findings of a MORI poll of 2015 which demonstrates that people prefer traditional style houses to modern by a substantial margin. The traditional style houses for this survey were taken from Poundbury and are new-build classical Georgian style properties. Building new homes in ways that are popular is important for many reasons but particularly so for those built in a factory – one of the factors thought to be limiting off-site construction is a lack of confidence by mortgage financiers. The UK lending market for factory-built homes is immature with little precedent for valuations, standards or regulation. Constructing those homes in popular designs and styles could make that process a bit easier.

The popularity of the Georgian style should come as no surprise. The Georgians took beauty seriously, dedicating whole architectural treatises to the study of proportion and the recording of beautiful mouldings from ancient Greece and Rome. Modernism, by contrast, came from a functionalist origin with the belief that beauty would result as a consequence of building well and fulfilling the brief. But as Robert Venturi

and others have observed, the Vitruvian triad of commodity, firmness, and delight (or in layman's terms, function, structure and beauty) is not an equation. Function plus structure does not always equal beauty; each of the three needs to be considered separately and with equal seriousness. The simple Georgian terrace or house has embodied proportional theories which go back to Palladio and ultimately ancient Greece and Rome. This is why they are generally perceived to be beautiful and the reason why they are so popular.

The Georgian style, specifically classicism, is particularly applicable to the current housing crisis because it was built in such a huge volume and at an incredible speed. Classicism was maintained throughout the Victorian era and up until the First World War. The developers of the 18th and 19th century wanted to build quickly and cheaply and so it is useful to see how they produced beautiful buildings within the same parameters which still constrain us today. A striking feature of these buildings is the repetition of all architectural elements. This is as much true for Downing Street as a modest Georgian terrace anywhere in the country. The use of repeated elements makes the building process more efficient because it eliminates one-off items which are time consuming and costly to produce.

There is a worry that even if beautiful Georgian style buildings could be made in a factory this would not be desirable as they would all be the same and none of the houses would have any individuality. I do not see this as a problem. I have recently designed a housing range for Halsbury Homes. We deliberately made all the houses look similar and I feel that the repetition gives the buildings better group value. This is where many new housing developments go wrong: at great expense developers make all the houses look different and the result is a very 'noisy' visual experience. The use of repetition has a calming effect on the eye because it does not need to process so much information. Georgian buildings are full of standard products made off-site, like sash windows, doors, staircases, fireplaces, ceiling rosettes, cornicing and skirtings. This means that reproducing Georgian architecture is well suited to off-site factory production and the Georgian builder would have happily prefabricated whole houses if it were possible at the time.

The Classical style which the Georgian and Victorian architects employed so well has been adapted to so many different materials and building methods. I feel sure that if house builders required classical style buildings to be made off-site in sufficient volume this could easily be done. The reason why so many off-site buildings are so hideous is because of the taste of the designers: that is where the problem lies. Many architects like to make their buildings look original and fear being 'pastiche'. The definition of pastiche is "an artistic work in a style that imitates that of another work, artist, or period". For some reason architects always try to avoid being labelled in this way, but I feel that as with all art forms, the artist (or architect in this case) is part of a tradition stretching back thousands of years that evolves and develops over time. Generations of architects have tried to make beautiful buildings and it is worth benefiting

from their knowledge. Making excessive attempts to avoid being pastiche is, in my opinion, the biggest stumbling block to the production of beautiful houses. It is a far greater obstacle than the engineering problem of producing beautiful houses off-site. If we can get to the moon and split the atom, the technical issues of making beautiful homes in a factory are well within our capabilities.



Houses in Norfolk that I recently designed for Halsbury Homes. Credit: author.

16 If we want beautiful places, let us define what they are

by Ben Bolgar

It is clear from the revised National Planning Policy Framework (NPPF), published in July, that the Government wants to encourage good design and community consultation in new housebuilding. The Government's hope is that if communities are more involved in the design of new places, so that they are built in a way the public find beautiful, then those places are more likely to be popular with locals – or at least opposed less. What is also clear in the revised NPPF is that the Government's foremost ambition is to address the housing affordability crisis by speeding up housing delivery to reach the target of 300,000 homes per year. So 'quantity' is the driver and 'quality' is something that may make development more popular – and, with a bit of luck, get it through planning more quickly. To me, the essential part of getting this right is how we define what makes a building or a place beautiful.

With Policy Exchange's report Building More, Building Beautiful, the myth that beauty is purely subjective has finally been busted. Architects have been very good at playing the subjectivity card as it takes decisions on good design out of the public's domain and into the hands of 'informed' professionals — namely them. The trouble with this ploy is that since the 1930s architects have rarely studied beauty and so buildings from the Forties, Fifties, Sixties, Seventies and Eighties are pretty ugly and unloved. A result of this is that most of the public tend to find older traditional buildings more attractive, wanting to live in them and do them up rather than live somewhere built anew.

More recently, the Letwin Review of housing supply concluded that we need to encourage greater diversity of housing types, as the existing narrow range delivered by the volume housebuilders isn't capable of being absorbed into the market quickly enough. The Review uses the words 'homogeneous' and 'diversity' often. This is positive because it starts to drill into the issue of what we are building most of in this country. The answer to that is both well known and deeply sad: lots and lots of homogeneous and uninspiring housing estates. This is particularly depressing given the sheer beauty of Britain's pre-1930 villages and towns and the human ability to complement the countryside and build in harmony with natural materials, landscapes and local traditions. What was perhaps outside the scope of Letwin's study was the correlation between mixed employment uses and housing delivery. Clearly if you want to build villages and towns, rather than housing estates, then you need a diversity of non-residential uses as

well as a diversity of housing types. So with nearly a century under our belts of getting it badly wrong, let us hope the Letwin Review instigates a new era of trying to get it right.

Having used Poundbury as a teaching tool for many years, I have found it fascinating to watch it develop and to study the many elements of design and delivery. At the moment, there are 1,500 homes with 2,000 jobs and nearly 200 businesses on site. All of these are fully integrated to make them walkable and add to the sense of diversity and community. The town was deliberately designed by the masterplanner Leon Krier to have small, medium and large plots - this allows control over how they are used. One of the great triumphs is that half of the businesses at Poundbury were started there and many of them, like the florist or the curtain maker, are in small units that don't pay business rates. Those units are typically a third of the rent of Dorchester High Street. A recent economic impact assessment by Dorset County Council shows that Poundbury contributes £98 million per annum to the local economy in goods and services and an additional £150 million will be contributed as it is fully built out. Bog standard housing estates are the complete opposite. They tend to leech value from their historic context, using the adjacent village or town as their 'host'. Mixed-use places, on the other hand, tend to give back to their local area, being based on a completely different economic model.



Poundbury - masterplanned by Leon Krier. Credit: author.

We need more places that are built to be mixed-use, walkable and with a wide range of housing types and tenures. They must also have a range of employment types with attractive streets. I am almost certain this is what Lord Best was referring to when he called for 50 more places built on the Poundbury model. The trouble is there doesn't seem to be anything else remotely like Poundbury out there, other than the next Duchy project

in Newquay for 4,000 homes for which the Prince's Foundation led the consultation and masterplanning, with Adam Urbanism, a design firm, coordinating thereafter. One job per household has also been pledged and, although it's a more challenging area in terms of sales values, it is proving incredibly popular with the locals – currently 150 homes are being sold every year.



Tregunnel Hill, Newquay – masterplanned by Hugh Petter of Adam Urbanism. Credit: author.

The real question must therefore be: will the Government's revised policies and aspirations around planning actually make any difference to the pretty bleak status quo of the box bashing machine in Britain? Unfortunately, the answer is: probably not. Part of the reason for this is that planning policy is still woolly and wordy. It is simply not precise enough or certain enough for planners to exert any real control. The reason why the two Duchy projects I have mentioned are so good is because the landowner exerted control. Developers had to build under license mechanisms to the landowner's design control – and then freeholds were transferred to the purchasers.

So what can be done to tighten up the planning system for it to meet the Government's aspirations for making better, more beautiful places? I believe the most useful thing would be a much clearer definition of what the public like and want in a place — and for those criteria to be measurable in some way. If one uses woolly phrases like 'good design' in policy then their meaning gets lost in arguments about subjective tastes. The worry I have with encouraging planning officers to refuse schemes on the basis of poor design is that the planning officer suddenly becomes the arbiter of taste. If, however, the specific elements that differentiate between a homogenous housing estate and a locally inspired walkable mixed-use place are clearly defined, then it might be easier to raise design

standards through planning. It would certainly become more objective and developers would have fewer places to hide.

What should those criteria include? In my experience of designing and delivering large mixed-use places, there are a number of things that are critical to building the sorts of places local people find beautiful – instead of building homogenous housing estates.

The first aspect is the way local communities and stakeholders are engaged in the design process. My view is this should be meaningful engagement rather than manipulated consultation. This means listening to people, allowing them to input into the design process and showing them you are responding to what they are telling you if it makes sense or is practical. Doing this not only builds trust but also teaches you about a place quickly and creates a better design. It could be measured by comparing community satisfaction levels between competing sites.

Next, as set out in the Letwin Review, we should define more clearly what a diverse set of housing types and tenures actually is – for instance a good amount of affordable housing and homes for people of all incomes and ages. This would need to be place-specific though it should not be demanded by development phase. This is because what is viable in development terms is very market dependent so there needs to be some flexibility. But again it's measurable and could be correlated against other more historic mixed places.



Upton, Northampton – a development partly designed by the Prince's Foundation.

Credit: author.

Thirdly, absolutely critical to a sustainable mixed-use place is the diversity of employment spaces. As trends in both office and retail are changing so quickly this would need to be very flexible. But the principle of having

a good range of small, medium and large employment spaces integrated into the place is perhaps the biggest difference that can be made. This would be very easy to define but, again, would need flexibility in delivery. Very few volume housebuilders have this model so to encourage a new breed of placemakers vs. housebuilders into the market, this is the element to really focus on.

Fourthly, build quality is absolutely essential. It is remarkable that the land buying and speculating system we have in this country favours the company that can build the cheapest (i.e. worst) product. There is a widespread belief in the false god that good design doesn't have to cost more money, but, for the most part, I'm afraid it does. The Duchy projects have higher build costs than a typical housing estate. Undoubtedly this impacts the initial return on investment, but this focus on quality over instant profit pays dividends in the long run as value is recouped in later phases as the whole place becomes more valuable. So having an open book on build costs and making sure there is at least a sensible contingency for façade enhancements, and well-proportioned windows, to differentiate it from the standard volume house type, is essential. This should also apply to the public realm - which is just as important as the buildings when it comes to making a nice place. One could also encourage a reasonable percentage of local supply and labour. This would not only help with sustainability, but also benefit the local economy, meaning local businesses and people see a tangible benefit in housing being built near them.

And last but not least are the arrangements for long-term management of the site, engaging with members of the local community and ensuring different ways the community infrastructure is looked after. There should also be strategies for incentivising the landowner to stay involved longer term in a stewardship role, perhaps by keeping a core estate with various elements of the mixed-use community areas, such as the village green or town square.

In conclusion, we can put 100 years of building homogenous housing estates behind us. And we can enter a new age of building better and more beautiful places in Britain. But this needs us to mandate and incentivise the delivery of buildings and places that we know the public like – and with sufficient flexibility to the developer. Let's define what we mean by beauty and build some real places.

17 Who is to blame for the failure of buildings?

by Robin Ballance

Playwright Sir Peter Shaffer once commented: "what is called 'development' is a necessary part of change: if you think this, so much the worse for you." His point was: we sometimes fail to notice change and act accordingly.

What gave rise back in the 70s to a fast-growing band of preservationists, such as Colin Amery, Gavin Stamp and Mark Girouard, was the need to champion the protection of many unlisted, historic buildings unique to London. The majority of these perfectly proportioned and elegant buildings had adapted over the years to ever-evolving changes throughout the centuries. Now they were threatened with complete destruction by stack'-em-high-sell-'em-cheap developers assisted by planning departments in the name of change and improvement.

What the public was faced with in the 1960s and 70s was the equivalent of a "Le Corbusian" nightmare - over-sanitised and over-planned buildings - a life-despising modernist mess whose only message was "Life Is A Prison". Were we starting to witness the failure of buildings, indeed of their design and architecture? Hasn't blame always been laid at the feet of the architect? Maybe the finger should point to planning officers and possibly those who commissioned the building in the first place.

Even listed buildings are at risk as was shown recently by the threat of development in Tower Hamlets.

In 2016, the residents of the Grade 1 listed Trinity Green Almshouses on the Mile End Road eventually and successfully fought off a long-standing threat: that of a new tower block (and part of the Crossrail development) that would forever blight their quiet existence by its very presence.



Trinity Green Almshouses on Mile End Road that were recently under threat. Credit: Reading Tom, Flickr (Creative Commons).

Originally built in 1695 for "decay'd Masters and Commanders", these almshouses are one of only two Grade 1 listed residential buildings – the other being the Tower of London.

Luckily, thanks to the campaigning of the community, the scheme was dropped and the uniqueness of the almshouses has been saved.

It's just a pity that right at the outset architects, developers and planners rarely engage with the broader community. By taking their thoughts into consideration, the local council's planners would better understand how residents might feel about the impact such a building would have on the immediate area.

This has not been the case for one of Colin's least loved areas: Victoria Street SW1. A prime example of how developers can get it so unbelievably wrong.

Identified as an "Opportunity Area" in the Mayor's Spatial Development Strategy for Greater London 2004, this particular area was always seen more as a "transport interchange". The area had been a victim of hurried rebuilding in the 60s due to the bombing it had suffered during the war.

But who were the Mayor's advisors when putting this particular London Plan together? What was their goal? And why is it that Victoria Street is such a poor example of how not to "get it right"?

Land Securities, who were responsible for the latest regeneration of the area, consider it now worthy of the title "destination neighbourhood". As a consequence of their ill-conceived improvements they have pulled down perfectly serviceable buildings to replace them with something squeaky and new and quite frankly more suited to a waterside in Abu Dhabi. Gone,

now, is the cinema that featured in Brief Encounter; gone too is Sutton House, one of the few remaining examples of "Moderne" retail 1930s architecture and built for the "Harrods of pawnbrokers", T.M. Sutton. It too was listed. Gone is the 1926 Portland stone Midland Bank (and later HSBC), designed by Whinney Son & Austin Hall, prolific bank architects of the 1920s and 30s.



An office building on Victoria Street. Credit: Gareth Williams, Flickr (Creative Commons).

The Nova Building, that replaced these buildings, has been given a number of critical descriptions — the Carbuncle Cup judges described it as a "hideous mess", and "an assault on the senses". One architectural correspondent wrote about it as a "bright red preening cockerel". To paraphrase Sir Peter Shaffer: "how could this have been built?"; "who in their right mind would give this planning permission?" and "why wasn't anything done to stop this?"

This misshapen edifice designed by PLP Architects lumpenly rises 18 storeys; it overpowers visitors emerging from Victoria Station with a plane of blood red glass. The facets of aluminium cross-bracing were a vague attempt at softening the impact of this great hulk. Far from reversing the damage inflicted to the Victorian fabric in the 60s and 70s, as the developers claim, Nova has done far worse than even the Luftwaffe bombing raids achieved! When I passed this building only three days ago, bits of the cross bracing were, rather worryingly, missing.

Sir John Betjeman's foreword of Colin and Dan Cruikshank's book The Rape Of Britain, sums it up rather well: "I hear words like 'complex', 'conurbation', 'precinct', 'pedestrianisation' which mean 'total destruction', 'comprehensive development'... Houses become housing, human scale is abandoned."

Sir John could have been describing Victoria Street's redevelopment. Originally, the developers of the Nova had applied to build an even larger scheme on the site: three towers at 40 storeys. This would have overshadowed Buckingham Palace but, thankfully, planning was refused by Westminster Council.

In order to appease the planning department, the tower blocks were removed and instead, inclines, faceted planes and ugly tilts were added as a kind of architectural shorthand to allow for protected views. The roofline is an unholy mess!

But it doesn't stop there. The cacophony of building styles carries on all the way down to Westminster Abbey. The rather awkward glass and steel horror surrounding Cardinal Place, which Colin nicknamed the "Vomiting Aardvark", was the first building to be finished. A snout appears to descend pavementwards and vacuum up commuters exiting from the new underground station beneath.

Bad planning and design has created a wind tunnel to the shopping area beneath this building: I doubt it can be much fun sitting outside one of the restaurants. Yes, technologically, it might be all whizz-bang fabulousness, sitting as it does on rubber washers while the underground rumbles below, but personally, what is the point if the overall design is just... ghastly?



Nova Victoria on Buckingham Palace Road like a "bright red preening cockerel". Credit: Acabashi via Wikimedia (Creative Commons).

Sadly, the streetscape is not the "beautiful destination area" that Land Securities were so desperate to produce; instead it is a complete shambles of architectural styles. Yet no more than 200 yards off the main drag are complete streets of well-ordered Georgian terraces, beautifully ornate Carolinean houses, glorious Victorian blocks of mansions flats, and of course the Byzantine elegance of Westminster Cathedral.

Land Securities have tried, like so many developers, to create a place that, in their mind, is modern, progressive and cutting edge. They failed, as there is no architectural cohesion. By using different architectural practices, all that has occurred is an egotistical fight – the "my building's bigger and shinier and more eco-friendly than your building" syndrome.

What Land Securities have seriously missed is the opportunity to produce something of immense, yet simple beauty. For example, a wonderful tree-lined boulevard could have been designed, offering a much-needed vista from Victoria Station all the way down to Westminster Abbey. Elegant buildings thoughtfully designed by one master planner using complimentary materials that rise gently up and encouraging any visitor to explore further. Not the crop of faceless, unfriendly monoliths we have landed up with that look more like a cheese platter.

It is often mentioned that our environment is being planned for us and that our futures mapped out. Someone else is defining how we are now supposed to use our living spaces, and how much space we actually live in.

Just as the 1960s buildings were pulled down in the name of progress, it seems that the life expectancy of the current horrors will probably be no more than a generation.

18 Do we get the public realm we deserve?

by Maddalena Iovene and Nicholas Boys Smith

Sometimes the most basic questions are the most important. What, when you come to think of it, is a public space? Lots of space in towns and cities is freely accessible to the public: pavement, plaza, parking lot and pedestrian underpass are all public spaces. But most parking lots don't function as civic squares. Most pedestrian underpasses are not places to relax in. What turns space that is public into a public space? And which public spaces are most valued? Or shunned? Why do people tend to prefer some places rather than others? And how does this affect their behaviour?

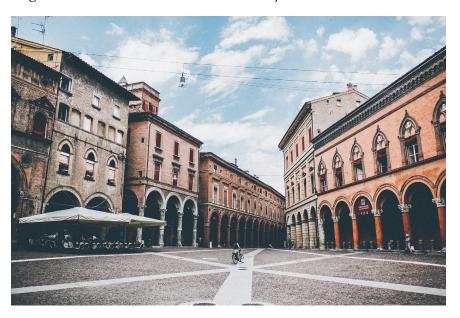
It can't be just the presence of seats. Some seats on streets or squares sit unused, gathering moss or pigeon poo for month after month. It can't be just the presence of grass to relax on or a tree to sit under. Some grass remains un-sat on week in, week out. And some trees cast their soothing shade over paving stones but never humans. Nor is it simply the presence of people. People walk five minutes to sit in some places. And scuttle through others to get there. Traffic clearly makes some places very unpleasant. But it doesn't always. People pause and preen and sit and stroll on the Champs-Élysées but tens of thousands of vehicles pass per day.

Nor is it just things to do or things to buy. Some streets with shops also serve as public places. People go there to buy but they also go there to be. But other streets remain purely transactional: arrive, purchase, leave; arrive, purchase, leave. And so, we come back to our question: why do people tend to prefer some places rather than others? In common parlance there is a simple answer to this complex question. Some places are "nice". Others are not. If a place is really good it might even be beautiful. And yet many design, development and planning professionals would reject this as ignorant and untutored. Good is subjective. "Ut quod ali cibus est aliis fuat acre venenum." One man's meat is another man's poison.

Is "nice" a nonsense concept, hopelessly shot-through with subjectivity and personal bias? Or can we define it and predict it at least up to a point? The good news is that we can. Improving computing power and data availability now permits us to measure and analyse with more confidence than ever before the relationships between the ways our towns, streets and public spaces are designed with all the elements of human support and wellbeing. What places make us happy? Where do we walk more, tend to know our neighbours, feel at home? What places relax us or stress us out? Which types of urban form or public realm facilitate crime? Which ones discourage it? It turns out that where we live has a real impact on our

mental and physical health. Humans are not deterministically controlled by our physical environments. But we are very influenced by them. Potentially up to 40 per cent of our physical health is dependent on where we live not who we are. And this is increasingly measurable and predictable.

The social enterprise, Create Streets, exists to research these relationships and to make it easier to co-create beautiful, socially and economically successful places with strong local support and which residents will love for generations. Our unique survey of every single property sale in six British cities in 2016 also shows that places people prefer also tend over time, guess what, to be more valuable²⁷. Everyone wins.



A public square in Bologna, Italy. Credit:Thaddaeus, download from Unsplash free images in October 2018.

So, based on the research to date and on our forthcoming study of the relative popularity of 19,000 public spaces in six British cities, here are a few rules for creating places people actually want to be in.

- 1 When it comes to greenery, little and often is normally best. We need frequent green spaces inter-woven into our towns, either as private gardens, communal gardens or well-overlooked public spaces between blocks and where people really need them and frequent them. Plant lots of street trees.
- 2 **Beauty really matters.** Any development that most people don't aesthetically like is missing a crucial trick. The most popular places with a predictable 70-90 per cent of the population have a strong sense of place, detail or colour and "could not be anywhere". They have "active facades" with variety in a pattern and a variety of streets, design and green spaces. They have streets that bend and flex with the contours of the landscape and some surprises. They are not designed by committee.

^{27.} See Boys Smith (2016), Heart in the Right Street and Boys Smith, Venerandi and Toms (2017), Beyond Location for the most comprehensive studies.

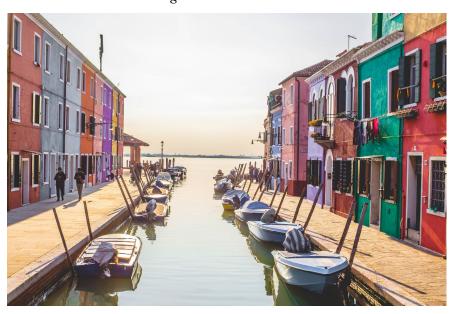
- Aim for 'gentle density'. The most popular and beautiful streets and squares are typically ones of 'gentle density' half way between the extremes of tower block and extended suburbia. Public realm enclosed by "gentle density" benefits from the advantages of both low and high density, more personal space but also more activity. Dense enough to be walkable and to provide walkable shops and offices. But not so dense as to be overwhelming, stressful or to create problems of long-term maintenance costs. Rarely more than four to six storeys high, land is nevertheless intensely used with a population density often between 50 and 220 homes per hectare.
- 4 Shape your places. The best and most beautiful streets and squares are often not that big. Public squares should normally be less than about 90m in breadth and have a height to width ratio of about one to one. In other words, the square or street is about as high as it is wide. Most people find this attractively enclosed. Higher can often feel (and be) dark and windy. Less (other than in villages) can feel oddly distended and tends to lead to less intensely used or walkable places.



A busy market square in Cambridge. Credit: Maddalena Iovene, 2013.

5 Create attractive well-connected streets. A good development has streets which "plug into" the surrounding city. Those streets should be well-connected, highly walkable, in a traditional pattern of differing types and sizes, with multiple junctions and route choices. There should be some pedestrian or bicycle only streets, but (other than in town centres) most should be mixed, with generous pavements. Streets should turn tightly for people, not gently so cars can take them at 30mph.

- **6 Mix up land uses.** Wherever possible we should seek a mixed use of residential, commercial and retail property. Retail lots should nearly always be interspaced with commercial ones and dotted around primarily residential uses as far as density permits.
- 7 Build blocks with very clear backs and fronts. Blocks should be neither too big nor too long. They should be smaller in the town centres than further out. Above all, these blocks need very clear fronts and backs with internal private or communal gardens safely inside them and public spaces safely outside them.
- **8** "Narrow fronts. Many doors.' There should be no long blank walls but frequent front doors (ideally with modest front gardens) or shop fronts. Buildings should appear to be buildings, not entire blocks. Narrow fronts with many doors and a strong "sense of the vertical" can be used to break up the scale of terraced blocks. "Walking architecture" is more popular, more complex and more valuable than "driving architecture".



Narrow fronts and frequent front doors in Venice. Credit: Antonio Molinari, download from Unsplash free images in October 2018.

Follow these rules and you are in great danger of producing streets and squares that are beautiful, walkable and wildly popular and that people will want to live, work or shop near. Too often we don't.

In our towns and cities, too many current new squares or plazas are windy sun-bereft canyons within shiny sheer facades that may dazzle and excite some but which most humans find provably unfriendly, stressful and disconcerting.²⁸ Similarly many (not all) recent estate regenerations are too greedy and too high, too ugly and too confused in their block patterns. Very often they have also failed to sufficiently rehouse former residents.

Further out in small towns and suburbs we continue to permit (or encourage) lumpen boxes surrounded by parking, which rip the soul

28. Sussman & Hollander (2015), Cognitive Architecture.

out of our public realm. Very recent evidence suggests that most highway officials continue to prioritise access for needlessly over-sized bin lorries over street trees, walkability or personal safety.²⁹ This is insane. Parking standards in much of the country also continue to prevent the creation of the most valued and valuable type of urban settlements.

Everywhere, many planners and (worse) professional design reviews continue to stamp down hard on anything that might whiff of sulphurous "pastiche" (despite the fact that it is provably more popular and valuable³⁰). Ironically, in parallel they wave through (or are unable to alter) volume housebuilders' developments often of shockingly poor design and build quality. The volume housebuilder model now seems to be largely one of a jerry-built, sub-vernacular of undersized, detached homes arranged in culde-sacs in a drive-to former field.³¹ People walk less. And landowners make 10 to 25 per cent less money than if they built proper urban extensions with a bit of heart.³²

Hardly surprisingly, consistent majorities of British people say they would rather live in older places than new ones (a fact presumably not true of any other part of the British market economy other than the antiques market).³³ And pricing data nearly always backs this up with 'heritage premiums' that normally outweigh the 'new build' premiums by up to sevenfold.³⁴

The Government has made major announcements in recent months to diversify the housebuilding market and encourage market entrants. This is welcome. But ultimately it is not enough. How do we get better at building popular places? To understand this, we need to think about urban regulation differently. For as long as there has been government, it has sought to minimise disputes between its people. And buildings and property are among the most consistently contentious issues, particularly with the risk of fire spreading from one building to another. Government intervention in urban land use decisions is therefore as old as cities. The Romans did it. And so has everyone since.³⁵ This profoundly changes the question from should government regulate land use and urban form to how we do so as efficiently and effectively as possible.

In this context, never forget how profoundly odd the modern British planning system is, the result of an unintended alliance between regulation-suspicious free marketeers and planners, protective of their professional discretion. The result is a system which is uniquely unpredictable. What can be built on a plot of land is far more open to debate than in many other countries. Most are more rule-based with greater certainty about what is deliverable. They start with the position that you have the right to build on your land, but you just have to do so in certain ways. Our system starts from the opposite position. Other than a few permitted developments, you have no right to develop until the government grants it to you.

We need to move the democracy upstream from the development control-process to the plan-setting process. We need a more visual set of provably popular housing and street patterns which can be argued over democratically and then delivered with more speed, efficiency and

- 29. Urban Design Group (2018), Street Design in the UK.
- For one example see Buitelaar & Schilder, (2016), 'The economics of style: measuring the price effect of neo-traditional architecture in housing,' Real Estate Economics, 45(1), pp.7-27. Also see Boys Smith, Venerandi and Toms (2017), Beyond Location, pp.82-7.
- 31. Of course this is not fair of all developments and developers but it is not an unfair summary of the wider industry. See Foundation for Integrated Transport (2018), Transport for new homes.
- 32. In fact, the pure price comparison shows much higher discounts per hectare but we have taken this down to take account of likely higher infrastructure costs. Boys Smith, Venerandi and Toms (2017), Beyond Location, pp.99-107.
- Boys Smith (2017), 'Learn to love the NIMBY and build more homes' in Manhattan Institute (2017), Urban Policy Frontiers, pp.75-9.
- 34. Boys Smith, Venerandi and Toms (2017), Beyond Location, p.120.
- 35. For a fuller history see Boys Smith (2018), More Good Homes, pp.54-65.

certainty. This would erect fewer anti-competitive barriers to entry and disempower volume housebuilders and those with influence but whose design preferences are measurably divorced from the wider public's. Those who disagree need to explain why Britain is uniquely different to much of the rest of the world. More regulatory certainty permitting more popular development patterns would facilitate the construction of homes and places that people find beautiful and usable and whose creation they will not merely tolerate but actively support.

19 Can good design survive the planning process?

by Professor Robert Adam

When I design a new group of houses or a large master plan, I want to work to a design vision and to maintain that vision throughout the process of design, planning and construction. I believe that the right design vision, its consistency and its expression through all aspects of a development, is one of the key factors in making a good design. As with most complex design projects, there are some formidable hurdles to overcome.

Firstly, there are the familiar and essential issues common to all such schemes: the right product for the market, the budget, control of construction and so on. These constitute the brief around which any good design should be based but, depending on the client and in particular with large housing developers, maintaining the original vision can be very hard work indeed. For developers, who have a primary interest in profit quite reasonably, sometimes the design vision takes second place to cost plans, interest rates, labour availability and many other practical issues. In the end, however, a balance will always be managed through the relationship between the designer and the client.

Secondly, and the focus of this essay, an unavoidable part of bringing a design and its vision into reality is that it has to pass through the planning system. Most planning policies have admirable intent, usually expressed in rather vague terms: "highest standards of design", "distinctive character", for example. And most planning officers want to see a good result, often as seen according to their own measure. Planning is, however, primarily a process, a procedure with a large number of actors and a series of administrative steps that have to be taken.

Unfortunately, this process has become so burdensome that it not only acts as a severe brake on the delivery of housing but is so arbitrary and fragmented that the chances of a design vision surviving become very slim indeed.

To illustrate my point, I will cite the typical path a 4,000 housing unit, mixed use urban extension will take through the planning process. This starts at a point where the land has already been allocated for development. This allocation is, in itself, a long process but once done, everyone agrees or accepts that a development will take place at a density, mix of uses, quantum of open space, schools and other requirements, all set down in a policy.

From the time of the first meeting with the local authority to the grant of an outline planning consent – that is just the masterplan, not the actual design of any buildings – the minimum time would be two years. Once a

consent has been agreed, not actually granted, there will then be a series of legal agreements that will have to be entered into with the local authority and possibly others. Many of these will entail significant expenditure for the developer and are subject to negotiation. The normal time span for reaching such agreements, the local authority's legal department having an interest only in reaching the agreement in their own timescale, is one year. Once the last of these has been finalised there will be a planning consent granted. If the developer is forward thinking and is prepared to enter into significant extra expenditure when the outcome and certainly the timetable are not certain, the outline application or masterplan will be a 'hybrid application', that is it will include a full design of the first one or two phases. This will allow the first building work to commence quite soon after the permission is granted. The technical drawings, infrastructure and other preparations for the first phase will take a minimum of six months.



A place created by highway regulations. Credit: Robert Adam.

Now, three and a half years later, if things have gone well, the first turf can be cut. If this is a high value, high demand area, two sites could proceed at once and these are usually about 200 residential units each. The build rate will try to match the likely sales rate and, generally, one house a week is a very good sales rate. So, the maximum number of houses coming onto the market from the whole development will be 100 houses a year, hardly a number that will satisfy the housing shortage anytime soon. The recent Letwin Report, quite rightly, believes that if the housing type and tenure range were to be more diverse the disposal rate could be more – but I have given an atypically fast-build-and-sale rate. Taking this sample, to some extent theoretical and to some extent taken from a real development, in seven years and six months ten percent of the original allocation will have been provided. This is one complete economic cycle, nearly two parliaments, personnel will have moved on, the market will have changed, policies could have been revised. No small builder could afford to go through this process, let alone the up-front infrastructure costs necessary to bring the site forward.

So what has happened in the two years from the first meeting and the agreement to grant consent? The design will be scrutinised in detail, quite rightly. The scrutiny will, however, be based on an interpretation and often several not-fully-aligned interpretations of "how the detailed design responds positively to the local context" or "how it creates a place with a distinctive character". These fine-sounding policies really say very little and their meaning is completely in the hands of the controller and can vary quite radically from that of the designer. For example, one set of guidelines says new development "should establish a new high quality 21st century contemporary architecture" and that "pastiche is not acceptable". This is a specification of a particular style in very thinly disguised coded architectural language and was written by a planner. This could be radically different from the developer's understanding of his market or the designer's vision. No matter, there will be a discussion around this point and the planning officers are the gatekeepers of the higher-up democratic process and will be the ones who make a recommendation to a very busy committee of elected councillors (in some smaller developments the permission process will not even get that far and be totally bureaucratic). Given the normal timescale, the pressure will be on the designer to fall in with whatever the officer or officers like or believe, extra time can cost very substantial sums in interest. At this stage the designer's vision could collapse - not necessarily and this is an extreme case but almost always there is some compromise based on little more than a planner's personal opinion or their interpretation of vaguely worded policies.



The size of refuse vehicles is more important than the places they serve. Credit: Harry Pope, Flickr (Creative Commons).

And this is before we have got to the other actors in the process: the ecologists, the tree officers, the hydrologists, the leisure department, the employment officer, the archaeologists, and the education department and — most powerful of all and often quite independent — the highway department, amongst others. Each of these has a single-interest contribution: the trees,

the leisure provision, the wildlife, their interpretation of road safety and so on. They often care little or nothing about the housing provision or the urgency of the process. In one development in which I played a part, this input was managed very efficiently (said without irony): on two occasions a representative of each interest and a number of different planning officers were put around a large table and each was asked to comment on the emerging scheme. The head of planning then drew a list of what each one of them had to say. Unless the comment was quite out of order (in which case it was for the designer to argue it out) each comment had to be incorporated in the scheme or it had to be demonstrated that there was a positive response. The only way to maintain anything of the vision in such a procedure is to be a very vigorous exponent of the vision and have the full support of the developer (not everyone who is a good designer has these presentation skills) when dealing with sometimes arbitrary opinions. Before the application is submitted, a report has to be prepared that satisfies the requirements of all these interests. For smaller developments these reports can be onerous and demonstrably pointless: for anything over 1 hectare, even if it is on top of a mountain, a flood risk report is required; if you have unprotected trees on your site which you can fell any time you like, you still have to produce a report on the impact on the trees; if you have a site of 0.4 hectares or more – a very small site - even if there is no identified archaeological interest, you must have a professionally prepared archaeological report; to cite only a few.

On top of all this, but entirely reasonably, you have to consult the local community. While there are often objections to the fact of development, these occasions are enlightening and usually sensible but at times the designer is steering a difficult line between the popularity of their design and the views of the various controlling interests. Finally, there might be a design review panel, often meeting twice in the process. These can be very good and positive but they can also just be one group of designers trying to impose their personal prejudices on the designer, who comes as a supplicant and is expected to 'respond positively', even in the case of profound disagreement on matters such as style.

These examples are based on a real case but it is quite typical and it is not the complete tale —this would take much longer. Many more applications are much smaller but many of the processes and reporting requirements are much the same.



Open space required by planners. Credit: Robert Adam.

The growth of this process by the addition of new reporting and consultation requirements, each with their own regulations (for example an ecological report has to be researched according the life-cycle of the species, has to be submitted and cannot be conditioned on the consent) has put a huge burden on the applicant in terms of time, expense and risk. This has driven out large numbers of the small local builders, who had local reputations and local interest, and has put housing supply and design increasingly in the hands a very few very large development companies with centralised budgets, the requirement for regional and national profit levels, high staff turnover, complex command chains, uniform products and overbearing relationships with designers.

And to return to where I began, what happens to the design vision in all this? In some cases, with visionary officers, strong designers and committed developers, there can be excellent results. But far too often, any design vision has been shredded in the process and any attempt to kick back will only prolong the process, generate 'position-taking' from the controllers, and most likely at some stage be overridden by the developers who are seeing some of their profit disappear. Such an architect will be unlikely to re-employed and there is a breed of non-architects and architects in the wings who treat design as only the geometric disposal of the maximum number of standard units on a site, while satisfying all controlling impositions — in effect filling in the spaces between the constraints. Any design vision is then presented as a series of vague and untestable statements that are a match for the vague policies they are supposed to satisfy.

If we are to improve delivery of housing and if we are to create places with real character and vision, this process has to be streamlined and reformed. Every threshold and need for reporting should be examined critically.

Time limits and formats should be set for all consultation responses and failure to comply will render the consultation null and void. Each interest should be directed to work positively to achieve a planning consent and recognise that the provision of well-designed new housing and mixed-use schemes might just trump a mature tree, a standard overlooking distance or a perfect road junction. Then we might just create space for design vision and for smaller developers to re-enter the market and provide the personal interest and local sensitivity absent in the large firms. We also need a transparent and direct link between local consultation and control – but that's another story.

20 Can AR and VR allow us to build beautiful?

by Professor Andy Neely

Imagine walking through the rooms of your new home before they have been built. Experiencing the sense of shape, space and light virtually would enable you to influence the design, function and construction before the build starts; move the position of a door, make a window wider to capture a view, lower a sink to secure easy access for a wheelchair user.

Being able to inform the design and construction of your own home is a luxury more often than not reserved for those sufficiently wealthy to commission an architect. But as the pace of technological development quickens and industry increasingly adopts digital construction, the opportunity to participate in the process of creating our homes could become the rule rather than the exception.

Data-driven construction

Technology is already shaping construction. We are living in a data-abundant age hailed as the fourth industrial revolution. Digital is driving change across all industries and the construction sector has much to gain. The Government's overarching Industrial Strategy (November 2017) and accompanying Construction Sector Deal (July 2018) acknowledge the significant role construction plays in underpinning our economy and society and its potential to deliver wide-reaching social benefits. Setting out the collaborative framework for a partnership between government and industry to transform the sector's productivity through innovative technologies and a skilled workforce, the sector deal report is visionary in tone, championing the shift to whole-life asset performance and the intent to secure the UK as a leader in the artificial intelligence and data revolution. This combined political will and appetite for change offers a significant opportunity.

Digital construction enables us to transform the way we plan, build, maintain and use our social and economic infrastructure, facilitating a new approach to construction that recognises whole-life value. The next decade will see digital technology combine with the internet of things, advanced data analytics, data-driven manufacturing and the digital economy to enable us to plan our built environment more effectively, build it at lower cost and operate and maintain it more efficiently.

Virtual Reality (VR), the visually and audio-visually immersive technology that transports the user into an interactive 3D environment, and Augmented Reality (AR) that blends virtual elements into the real world,

are predicted to reach a plateau of maturity in two to five years and five to 10 years respectively.³⁶These technologies are forecast to merge into mixed reality devices that allow the user to overlay data-driven virtual elements with their own view of reality. The evolution of VR and AR technology is of particular interest to designers and architects as potential tools to inform and improve the design and build process.

As smartphone technology advances, the expense of VR hardware will be replaced by cheaper headsets that incorporate smartphones with VR-quality graphics. VR invites the end user to explore and interact with a virtual representation of a room, floor or entire building providing a mechanism to highlight elements of a design the user enjoys as well as any aspects they may struggle with. Feedback will improve the final design and functionality for the client, while making the business of designing faster, cheaper and more efficient. A more participatory and engaged approach to creating the environment around us will allow us to imagine what building beautiful might look like. Scale this up, and the possibilities, and benefits, are compelling.

Better decision-making, better design

VR offers stakeholders the chance to make more-informed decisions and helps designers, developers and planners to better understand the way people interact with space, buildings and technology. Making the business case for building infrastructure becomes more sure-footed; investment will be easier to secure if investors can experience the assets they are being asked to finance and have the assurance that a development's risk is low but quality is high. Designs can be piloted to secure feedback from prospective users to optimise the design and build. Lessons can be learned and success replicated.

Digital technologies can facilitate more inclusive design. Researchers at the Centre for Digital Built Britain (CDBB) are studying VR as a tool to design accessible buildings to meet the needs of people with complex sensory conditions. Built environments which are not inclusive act as disablers³⁷ to communities with varying needs, including the elderly, children and people with dementia. Modern neuroarchitectural approaches give insight into the use of VR to support the design of buildings, providing a tool to evaluate different built environments and promote aspects of design that encourage greater wellbeing. Tools to deliver a user experience risk assessment³⁸ open up possibilities of inclusive design³⁹ that enhances the end user experience. Buildings and infrastructure incorporating sensors will provide valuable data confirming how people use a building and navigate the built environment. This data will provide information to improve asset operation and management and be fed back to designers, developers and planners who will build better.

^{36.} https://www.gartner.com/smarterwithgartner/3-reasons-why-vr-and-ar-are-slow-to-take-off/

Thomas Stone CDBB Mini research project Designing Safe Complex Environments: https://www.cdbb.cam.ac.uk/CDBBResearchBridgehead/2018Mini-Projects/2018MP_Bance)

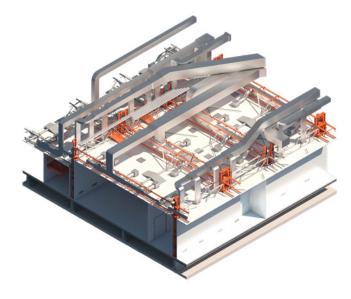
^{38.} https://www.thecentriclab.com/

^{39.} Arup Cities Alive

Less is more

These innovations will help to build a more sustainable future in the face of pressing global challenges. The recent Intergovernmental Panel on Climate Change (IPCC) report Global Warming of 1.5 °C (October 2018) and the United Nations 2030 Agenda for Sustainable Development make clear the need to tread lightly with our carbon footprint and the consequences if we don't – drought, famine, floods and poverty for millions across the globe.

Where we need to build new, we must use less. Digital technologies provide the tools to deliver more capacity out of existing infrastructure and improve the way our assets deliver social and public services. Digital tools and monitoring systems enable buildings and infrastructure to be designed better — more sustainably, using materials according to verified measurements rather than conservative estimates. Research at the Centre for Smart Infrastructure and Construction (CSIC) demonstrates how sensor technologies can create smart infrastructure and the opportunity to build living assets that engage with users and provide valuable data to make better-informed asset management decisions. Smart cities will be designed to manage energy, water and food resources more efficiently and integrated systems will deliver new ways to make more of the resources we have.



This is a detailed digital model used for stakeholder sign off and 'virtual construction' - from this model components are procured, prefabricated off site and delivered to site in a predetermined sequence for final assembly. Credit: Bryden Wood/GSK.

Tools of the trade

Advanced sensor technologies allow us to understand the performance of the structures we build and to use data to optimise the design, construction and maintenance of our assets. A National Digital Twin, a federation of digital models that will enable better decision making in the delivery,

The Cambridge Centre for Smart Infrastructure and Construction: https://www. centreforsmartinfrastructure.com

operation, maintenance and use of infrastructure, is within sight; the Digital Framework Task Group (DFTG)⁴¹ is currently collaborating broadly across industry to explore the underlying information management framework for the built environment that will be the foundation for digital twins.

The digital tools, standards and processes collectively known as Building Information Modelling (BIM) is at the heart of this digital transformation and provides a critical opportunity to improve performance and productivity in construction. The Centre for Digital Built Britain is the custodian of UK BIM, a collaborative process providing accurate and transparent information using 3D models and a common data environment to access and share information efficiently across the supply chain, reducing the risk of error and maximising the ability to innovate.

Innovation and collaboration in construction is vital to future success. The call for more and better housing in the UK demands new and affordable models of housing production and design⁴² and this requires radical industry change. While fully collaborative 3D BIM is mandated on government-procured projects, the wider construction industry is still to adopt digital transformation to address problems of productivity, overrunning and waste. Combining BIM with off-site manufacturing will bring real opportunity to improve our capacity to build houses at the scale and quality needed in the UK.



Using an Igloo Vision immersive cave to preview functionality, lighting, and space in a civil design. Credit: AECOM.

Sense of place

Digital technologies invite better engagement with the process of designing our built environment. Greater engagement with the public will drive more participation in the process of developing the houses we need, the cities we live and work in, and the buildings that deliver vital services to our communities. If people are given the chance to make meaningful contributions to the design and function of the built environment, there is opportunity to revive our weary planning system and introduce

^{41.} The Digital Framework Task Group: https://www.cdbb.cam.ac.uk/Blog/2018JulyBlogEnzer

Dr Gemma Burgess, https://www.cdbb.cam.ac.uk/ Downloads/ResearchBridgeheadDownloads/ BIMandUKHouseBuildingFinalReportforCDBB.pdf

efficiencies. If building better leads to securing planning permission in a timely manner, the incentive to up the quality and aesthetics of new housing is there for developers. Plans for developments that are supported by the communities for which they are built and developments that give people a sense of place will relieve the burden of resistance on the planning system that leads to costly delays. This will allow people to see and experience buildings before plans are passed or bricks are laid, to invite comment and real engagement in the process will surely deliver the wished-for community consent that the Government's new Building Better, Building Beautiful Commission identifies as the prize.⁴³



Walking through a BIM master model during pre-construction review. Credit: AECOM.

House builders could share data in a secure manner to shine a light on the designs and functions different communities of users prefer to form a better understanding of universal design and accessible architecture. Data could be the gateway to 'building beautiful'. Combine data with VR and AR tools that invite people to virtually try a home, office, housing development, hospital or school before they are built and a door opens for a more collaborative process of participatory design that captures meaningful engagement.

Benefits are clear and we have the digital tools to hand. Will this transformation lead to the building of homes the public find beautiful? Defining beauty is a riddle best left to philosophers. But a house designed to meet our needs, an affordable, sustainable dwelling built to function well, a home in which we would wish to live is, surely, a thing of beauty.

^{43.} Building Better, Building Beautiful Commission: https://www.gov.uk/government/publications/building-better-building-beautiful-commission-draft-terms-of-reference

21 What building beautiful can do for mental health

by Will Heaven

Can beautiful buildings change our moods and affect our mental health? Intuitively, the answer is yes. The ancient view of Salisbury Cathedral's spire, visible for miles, reminds me powerfully and reassuringly of home. Regent Street's sweeping curve, "a real layer-cake of sensations" as the architecture critic Ian Nairn put it, is a view that's striking and uplifting in a different way. A photo of a colourful, modern terraced street in Delft, in the Netherlands, looked so bright and interesting that I felt cheered just to have seen and shared it on Twitter.



A modern terraced street in Delft, still under construction. Credit: Graham Taylor, taylorcreations.co.uk.

Equally, it seems that ugliness in the built environment has the opposite effect. Walk along the Thames towpath north towards Kew and suddenly the Brentford Towers estate looms into view on the other side of river. The grey 24-storey buildings interrupt the horizon, jarring with the natural and built environment around them. Places like this, which the local council says are "deteriorating", provoke feelings more like despair. As Policy Exchange polling revealed, social housing tenants are far more likely to say they feel "bored" and "depressed" about where they live than others. Elsewhere, drab buildings like the Travelodge hotel next to Balham

station – in south London but more suited to Pyongyang – seem to have an effect that's more negative than, say, walking around the nearby red-brick Heaver Estate.

But mostly these are my subjective judgements. Buildings which lift my spirits may fill others with despondency and vice versa. A journalist friend who is an advocate for Brutalism recently told me that Big Ben, now covered from top to bottom in scaffolding, has "never looked so good". I have to concede that even my own reactions are not consistent from day to day, often depending on my mood.

This points to an important reason to proceed with caution when considering the impact that buildings might have on mental health. It may be, as David Halpern – a psychologist and now Chief Executive of the Behavioural Insights Team at the Cabinet Office – and others have acknowledged, that mental ill health can cause the built environment to be perceived as a problem, even it wouldn't be otherwise. On one level, this seems to be backed up by the latest psychological research.

In the recently published Blueprint: How DNA makes us who we are, Professor Robert Plomin writes that our genetic make-up has a profound effect on how we experience the world around us. As he puts it, "the psychologically effective environment is the perceived environment. That is, what we perceive about the environment is what we actually experience."

Perceptions, he says, even about environmental factors as mundane as the weather, can pick up genetic influence as they filter through our cognitive biases and personality. Do you often complain about noisy neighbours? Your neuroticism may be a factor. Does living in a flat make you feel claustrophobic? Again, it may be an inherited trait that influences your perception. Depressed by your home? That may be the case no matter where you live.



Brentford Towers, West London. Credit: Steve Keiretsu, Flickr (Creative Commons).

It's hard to account for DNA, but if researchers can control for factors like income, which correlate with mental health – we can still make worthwhile observations about the built environment based on large numbers of

people's views. There is something to learn here that goes further even than polling.

The use of crowd-sourced data, harvested in massive quantities online, means that we can ascertain the opinions of hundreds of thousands of people about their experiences of the built environment. For example, a recent study led by Dr Chanuki Illushka Seresinhe at the University of Warwick attempted to quantify how beautiful places might have an impact on our wellbeing. She used crowdsourced data from the website Scenicor-Not, which asks people to rate the 'scenicness' of random images of the environment that cover nearly 95 per cent of the 1km grid squares of Great Britain – in both town and country, natural and manmade.

This involved 1.5 million ratings of people's subjective opinions of beauty in the environment. They simply had to rate pictures of scenes as varied as a roundabout in Newbury and Trafalgar Square in London from 1 to 10. This was then taken and combined with census data on people's reports of their own health. Seresinhe concluded: "Across the entire English dataset, we find that inhabitants of more scenic environments report better health." Obviously, there are neighbourhoods that will be richer, have better access to services or be less polluted, but the researchers found that the results seemed to hold, even when they took these factors into consideration. Scenicness meant better well-being.

In a separate study, Seresinhe used data from an app called Mappiness, which asks users in realtime how happy (or not) they are feeling at a given time of day. The app prompts them for an immediate answer and also asks them what they are doing. Once again, even with controls in place including on income, whether people are currently at work or home, whether they are in the natural or built environment, the results clearly showed that people are happier when they are somewhere scenic: importantly, this included urban spaces, especially around historic buildings. Such experiments give us an idea of what we might soon be able to learn with crowdsourced data and A.I. which can work out what features in the environment people are likely to rate as beautiful — and how they rate their mental health when they live in or near a particular building. The data will one day be hard to ignore. It will involve the views of potentially millions of people. We may discover that we all have genetic biases in common.



Elmbourne Road, Balham – a part of the Heaver Estate. Credit: Stephen Mackay via Geograph (Creative Commons)

David Halpern's landmark 1995 study, More than bricks and mortar? Mental Health and the Built Environment, goes beyond subjective opinion. He proves, after a thorough review of the literature as well as a series of studies and analyses, that "the built environment is causally implicated in the aetiology of mental illness, and especially in the types of mild psychiatric and somatic symptoms that are common in the community". He breaks down the causes and his conclusions into four parts.

First of all, there is environmental stress – the "most direct way in which the planned environment can affect mental health". Pollution, noise, certain weather conditions, and high social densities can lead to negative mental states such as irritation. The types of environmental stress that lead to more than irritation can include things such as "chronic difficulties in social regulation (for example, sharing living space with unrelated others)" or threats, such as the fear of crime. This affects much more than mood since coping behaviours can be compromised.



The Travelodge, Balham. Credit: N Chadwick via Geograph (Creative Commons).

Secondly, there is social support and what Halpern calls the "mixed blessing of neighbours". People living close by can have a positive influence on mental health because they can provide support and assistance. On the other hand, if relations between neighbours are bad, neighbours can be "a major source of irritation, annoyance and even fear". It seems that the presence of large numbers of strangers in an environment is key. If the environment around your home is a thoroughfare or gathering place for people you don't know, it makes it more difficult to recognise familiar faces and get to know other residents. So you worry more about crime and have less friendly relations with those around you.

Thirdly, there are the symbolic aspects of the environment and what Halpern calls "social labelling". If people know an area to be a "bad" one, this can have "very dramatic and self-fulfilling effects on that area". An anecdotal example: the Brentford Tower estate mentioned above is the setting for a BBC sitcom called People Just Do Nothing, about a pirate radio station. For those residents that are aware of it, that is likely to have a negative impact on their perception of where they live. This is in part because of what is described as the aspiration-achievement discrepancy. As Halpern writes, "individuals' aspirations and perceptions of achievement partly result from comparisons to others". They may know that, on some level, they are an object of fun for other people.

Finally, there is the planning process. If residents can't participate in the decisions about their environment, Halpern observes, "then not only is it more likely that the decisions taken will be unpopular, it is also likely that residents will experience a sense of powerlessness and frustration". This is supported implicitly by Policy Exchange polling, which found that most people thought planners and developers had far too much say in what was built and where – even though many more people (over 40 per cent) thought the local community should have the most say.

Despite these studies, the impact of the built environment on mental health remains an under-researched policy area. This is especially true of the impact of beauty. The Centre for Urban Design and Mental Health, a start-up think tank, argues that factors in urban design like green spaces and access to nature, active space for exercise, transportation and connection, sleep and safety are the sorts of things that really impact mental health. There is no question that these are important factors. But it is telling that beauty doesn't feature in their list – too often it's overlooked by architects, designers, planners and politicians as secondary, as the Government has apparently recognised with the creation of its new commission. But policy researchers can help to change this if they use the latest data gathering, analytic techniques. With the right methods, we may be able to prove conclusively that what people like in the built environment is good for their mental health too.

22 What is popular design and style?

by Martin Boon

The announcement of Government's Building Better, Building Beautiful Commission has brought into focus our conception of beauty. The Commission has been tasked with championing beauty in the built environment and finding ways for new housing development to be more popular (or at least less opposed). It will promote better design and style across the country so that it reflects what communities want, building on the knowledge and tradition of what they know works for their area. This is a huge task and the first place to start, I believe, should be asking the public what they want and like.

Earlier this year Deltapoll, the public polling company that I run, and Policy Exchange did exactly this. We polled over 5,000 people from London and the South East asking them about their preferences for the design and style of the built environment – and specifically what sort of new homes and places they would like to be built. ⁴⁴This was perhaps the biggest polling exercise of its kind and certainly the first for a number of years. We also ran four focus groups. Two were with younger and older members of the public to explore their design and style preferences in further detail. The other two were with architects and planners to understand their opinions on the factors that influence housing development.

So, what did we find?

Good design is highly valued

The first point to make is that the public in London and the South East—which herein I will refer to as 'the public' — are very positive about the impact of design on their lives. 84 per cent of respondents to our poll thought that better quality buildings and public spaces improve people's quality of life. The same percentage thought that living in a well-designed community improves people's happiness while close to seven-in-ten (68 per cent) thought a well-designed neighbourhood will help to reduce crime.

The public feel locked out of the design and build process

The next point to make, which is much less positive, is that the design and build process is perceived to shut out the very people whose thoughts and ideas are integral to the creation of beauty in the built environment: architects with a responsibility for creating it and the public who end up experiencing it. When asked who they think has most say in how homes are designed and built, just 4 per cent said architects and 3 per cent said the local community. This is a planning environment in which planners (34)

Deltapoll, May 2018. Building Design Preferences Survey for the Policy Exchange report: Building More, Building Beautiful. Airey, Wales & Scruton June, 2018.

per cent) and developers (37 per cent) are instead thought to hold sway. In comparison, 41 per cent of respondents thought the local community should have the most say, 26 per cent thought planners should have the most say, 11 per cent thought developers should have the most say and 10 per cent thought architects should have the most say.

These things matter. In focus groups,⁴⁵ tension coursed through discussions about the need among planners for buildings to be designed from the outside-in, which clashed with the need among architects for them to be built instead inside-out with the end-user in mind. When developers' profit motive is thrown into the mix, design schemes are subjected to a gamified process in which beauty is subjugated at first to rules designed to minimise 'harm', and then to a financial bottom line. This encourages as many homogenised box-like homes that a development can possibly squeeze in. Beauty, in other words, can wait.

The public take a dim view of their built environment

Unfortunately, the public take a dim view of what gets built. In our poll almost half (49 per cent) of respondents thought poor quality environments are the norm in Britain and just 17 per cent disagreed. A full 56 per cent of them think that newly built modern homes are built as cheaply as possible to maximise profit margins.

There is little sympathy with developers. A giant swathe of the public (77 per cent) thinks that, too often, cost is used as an excuse to justify badly built, soulless new developments when something so much better is possible. They also think that well designed homes could be built at the same cost (55 per cent).

Design and style is subjective but some characteristics are more popular than others

We know the public care about what buildings and places look like. We know they feel locked out of the planning process. And we know that they feel short changed by what is eventually built. But what are the sorts of buildings and places they actually want?

Seven in 10 (70 per cent) members of the public support low-rise, traditional properties built on streets. Support drops to 44 per cent for medium-rise developments in urban areas, and as for urban high-rise towers, better not to even ask.⁴⁶

Close to half of poll respondents (48 per cent) would like to see traditional terraces with tree lined streets built in the future. Three in ten (28 per cent) want housing developments or estates in a modern style and 11 per cent want new homes built in dramatic and futuristic designs.

The idea of building new places is very popular. Over half (55 per cent) of the public support the building of entirely new communities or towns built in suburban or rural areas when they feature low rise, traditional two-story properties. Eight in 10 (79 per cent) members of the public support the building of garden cities with leafy streets, wide avenues and public squares.

Deltapoll focus groups with Planners, Architects and the general public, May 2018 for the Policy Exchange report: Building More, Building Beautiful. Airey, Wales & Scruton June, 2018.

Deltapoll, May 2018. Building Design Preferences Survey for the Policy Exchange report: Building More, Building Beautiful. Airey, Wales & Scruton June, 2018.

One thing is for sure: people do not want more identikit homes, in whatever form they may appear. Only one in ten (11 per cent) satisfy themselves with design uniformity, but three-quarters (74 per cent) want a style and fit that coexists happily with the environment rather than dulls it.

Evidence of failing to meet one or more of these conditions is everywhere. It is found in the integration of Docklands residential and commercial sectors, where the dividing line between a home and an office is blurred by uniform towers of steel and glass. It is found in the carpeting of the Thames Valley with what one focus group attendant described as 'Noddy housing' – i.e. housing of a low build and design quality – masquerading as modern family living. And it is found in prestigious locations where throwing money rather than thought at new building yields rapidly rising clusters of high-rise battery farms for humans.



An unsympathetic new development in Moss Side, Manchester. Source: Alex Pepperhill, Flickr (Creative Commons).



A student housing development jutting out of Tottenham Hale. Source: Alan Stanton, Flickr (Creative Commons).

People want a sense of belonging and happiness from their home

There is a growing body of evidence linking the built environment with mental health and wellbeing, so it was unsurprising that our polling found that design preferences are about more than bricks and mortar. When asked about how they felt about their own home, half (51 per cent) of the public said their home made them happy. Just over a third (35 per cent) felt proud of their home and one in five (21 per cent) felt joyful about their home. When asked what emotion they want to associate with the look and feel of homes and buildings in their area, one quarter of respondents (25 per cent) said belonging, 23 per cent said pride and 17 per cent said happiness.

These figures seem essential for reminding the design community what, in the end, homes should be there to give. Indeed, four in five (82 per cent) people thought architects should concentrate on designing buildings that are well built, comfortable and beautiful. When asked what features they associate with homeliness, the top five (out of ten) were: thick, sound resistant walls (61 per cent), more spacious, but fewer rooms (44 per cent), feature windows (42 per cent), high ceilings (33 per cent); and exposed brick façades (26 per cent).



Design features like exposed brickwork is valued by people. Source: David Wright, Flickr (Creative Commons).

Beauty is more than skin deep

An important point is that people's conception of beauty and good design concerns much more than aesthetics and emotions. When asked what should be considered when designing homes for people to live in, first and foremost the public say a new home must be built to last (47 per cent), use energy and water utilities efficiently (45 per cent) and be safe from fire and accident (36 per cent). Only after such necessities have been met, do the public switch to design considerations (32 per cent).

People also want to live in communities with lots of space, greenery, and calm. For people don't just buy bricks and mortar, they buy their own place in the world — a community, replete with parks and open spaces (58 per cent considered their presence to be important in making their area a pleasant place to live), quiet areas (54 per cent), and plentiful street planting (54 per cent).

Conclusion

So there we are. Broadly speaking, the public want low rise traditional homes that fit in with buildings already there in a place with lots of greenery. In the areas where homes are most needed – where land values tend to be highest and where planning regulation often prevents construction – making these sorts of developments viable is a challenge, but certainly not an impossible one (as many schemes across the country are showing). The big question for construction industry stakeholders and Government's new Commission, then, is how to lead public sympathy towards more space-efficient builds, which somehow remain compliant with deep-rooted notions of what a beautiful home looks like.



£10.00 ISBN: 978-1-910812-64-8

Policy Exchange 8 – 10 Great George Street Westminster London SW1P 3AE

www.policyexchange.org.uk