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housing and health –

connections, tensions, and deregulatory consequences

Based on his Harveian Society of London lecture, delivered in April 2021, **Nick Raynsford** reviews the history of our understanding of the connections between ill-health and bad housing conditions, and the unintended and damaging consequences of a conviction that deregulation is in itself a good thing

Over the past 150 years or more, our society in the UK, and indeed in many other countries too, has developed a progressively better and deeper understanding of the linkages between inadequate housing and poor health. While direct causality cannot always be proved, it is widely known and almost universally accepted that damp, insanitary, overcrowded or otherwise unsatisfactory housing conditions are likely to have serious adverse impacts on people's health and wellbeing. The worse the conditions, or the absence of any permanent shelter, the greater the likelihood of serious ill-health and shorter life expectancy.

There is now a substantial body of evidence, not least that emerging from the work of Sir Michael Marmot, linking poor health with social determinants, among which poor-quality housing is a major factor. This goes back a long way, and as I trained as an historian many years ago, I will start this article with a short overview of the history.

Growing awareness of the connections between ill-health and bad housing conditions in the mid to late 19th century prompted a series of policy initiatives designed to tackle and overcome the most serious problems. The most significant were:

● measures designed to improve or close the most insanitary properties, including slums, often referred to as 'rookeries', and squalid and overcrowded lodging houses;
● bye-laws, a precursor of the current planning system, requiring minimum standards of space between new dwellings, as well as adequate ventilation and access to light;
● new model housing schemes, whether promoted by philanthropists or charitable associations such as the Peabody Trust, enlightened employers such as Titus Salt or the Rowntree family, or visionary planners such as Ebenezer Howard, who promoted the concept of the Garden City to enable urban dwellers to benefit from access to healthier green surroundings; and
● housing for the working classes provided by newly established local authorities such as the London County Council.

While all of these initiatives helped to improve the conditions of some of those living on low incomes, they were, in certain respects, discriminatory and far from universal. The legacy of the Victorian Poor Law, with its harsh emphasis on distinguishing the deserving from the undeserving poor, and its preoccupation with minimising the risk of perverse incentives to shirking or idleness, cast a long shadow well into the mid 20th century.

Homes at New Earswick, York, the Rowntree model healthy housing scheme built in the early years of the 20th century

Just how long a shadow was brought home to me when I started work for a charitable housing organisation in 1973, and discovered that the policy of forcibly separating homeless families was still operated by a substantial number of local authorities in England. This involved the offer of temporary accommodation only to women and children, with husbands or male partners refused admission, and the threat of children being taken into care. These practices, deeply rooted in Poor Law thinking, had, of course, been highlighted in the ground-breaking television film of the mid-1960s, *Cathy Come Home*, but like many other young and idealistic people, coming from a comfortable middle-class background at that time, I had assumed that such practices were the exception and largely a thing of the past. They were not.

The two driving thrusts of housing policy, as it evolved in the late 19th century and was consolidated throughout the first eight decades of the 20th century, sought to remedy unsatisfactory conditions through regulation, and to provide a supply of decent-quality homes at a price which middle- to low-income households could afford. The bulk of this affordable housing was, from the start of the 20th century until the 1970s, provided by local authorities, in the form of council rented homes. The underlying assumption,

with the exception of a brief period in the era immediately following the Second World War, was that housing remained a market commodity, with the state intervening only to address market failures, such as exploitation of shortage, or an inadequate supply of homes.

Tensions between market pressures and regulatory controls

Implicit in this assumption was a tension, which has bedevilled housing policy for a very long time, between the market and the regulatory authorities. Rent controls were the most salient battleground, but not the only one. Too loose a regulatory framework would allow exploitation of shortage, leading to unacceptably low standards or unacceptably high rents, or possibly both. The political imperative of avoiding industrial unrest during the course of the First World War, and in particular of keeping up production in the munitions factories, had prompted the introduction of rent controls at that time, and they remained a key feature of housing policy, and a cause of significant political controversy, throughout the 20th century.

Getting the balance right between the free market and the regulatory regime proved an extremely challenging task. The unsavoury activities of the

notorious landlord, Peter Rachman, in the 1960s provided a powerful case for stronger regulation. But push this too far, and the market would simply not provide the homes – witness the near terminal decline of private renting, which had provided around 90% of the country's homes at the start of the 20th century, to a dying tenure providing only around 10% of the total housing stock by the late 1980s. Landlords argued, with some justification, that the return they received from regulated rents was insufficient to maintain the properties in decent condition. But in a situation of shortage the rents that might be achieved in a free market would be way beyond the means of those on modest incomes looking for a home to rent.

While an expanding council housing sector was generating a good supply of better-condition homes with subsidised rents, the decline of the private rented sector may not have appeared a great cause of concern. But for those not in practice eligible for council housing – and that covered most single people below retirement age – the disappearance of private renting options was a serious loss. And once the Thatcher government had turned off the tap that was funding the building and maintenance of council homes, the problems generated by an inadequate supply of good-quality, affordable rented homes became starkly visible.

'**Contrary to the view promoted by many of the large housebuilding companies in England, segregation of social housing from owner-occupied developments is not part of the natural order of things**'

Similar tensions between market pressures and regulatory controls have applied in related fields such as planning. The largest output of new homes in England came in the 1930s, facilitated by the expansion of urban public transport networks, such as the London Underground, which made it possible for people to live much further from their workplace than ever before, and by the greater availability of mortgage finance. But the downside was growing public hostility to what appeared to be uncontrolled urban sprawl, reaching out along arterial roads and transport networks and threatening to cover large areas of green fields with housing – so-called 'ribbon development'.

This in turn prompted the introduction, in the immediate post-war period, of town and country planning legislation which sought to shape development into what we now call more sustainable patterns. New Towns such as Stevenage and Harlow, and

later Milton Keynes, were promoted to allow outflow from overcrowded cities and to deliver a healthier and pleasanter living environment, based on the principles that Ebenezer Howard and the Garden City movement had been advocating.

At the same time, urban redevelopment programmes were both clearing the slums and reducing housing densities. The latter was made possible by the outflow of former inner-city residents to the suburbs or New Towns. In parallel, the Green Belt was established to prevent unrestricted urban sprawl and ensure the survival of green space between existing settlements. At the time this combination of policies was widely supported (albeit not always in the areas designated for new settlements) as a rational approach to ensure provision of much-needed new homes, and to overcome the overcrowded and unhealthy conditions applying in much of the poorer housing in Britain's cities, while protecting the countryside from indiscriminate development. It is sobering to know that the planning system introduced in 1947 to achieve this is now excoriated by the present government as 'Soviet-style dirigisme'.

Increasing segregation

The slum clearance programme resulted in the demolition of a large number of sub-standard, mostly privately rented homes, which were replaced mainly with new council housing, built to much higher standards, but often stigmatised within a relatively short period of time, partly because of the use of unsatisfactory system-building technology, partly because the high-rise format popular with architects at this time proved unpopular with many of those who ended up living in the buildings, and partly because they were almost always physically separated from other tenures.

Contrary to the view promoted by many of the large housebuilding companies in England, this segregation of social housing from owner-occupied developments is not part of the natural order of things, nor something which has existed for centuries. On the contrary, it is very much a product of recent times. In medieval or Tudor London, rich and poor were not geographically segregated. They often lived not just in the same street, but in the same house, and often with a load of animals sharing the building too. Of course, the well-off had much more comfortable rooms, and the poor were generally there as servants. But they still lived in close proximity.

This pattern of living continued through Georgian times. It was only the rapid development of industrial cities in the 19th century which started to create segregated societies, with the new industrial workforce living in squalid homes put up in a hurry and to very low standards, in areas which rapidly became slums. In London (and some other cities) this led to a marked geographical division, with poorer housing disproportionately located to the eastern side of the city, where the prevailing westerly

winds tended to carry the smoke and airborne pollution which was the inevitable consequence of the coal-fuelled industry generating the city's wealth.

The clearance of such housing in the 20th century should have allowed a return to more integrated patterns of development in which people with different income levels could still live in the same street. Sadly this did not happen, and a whole new set of problems of social exclusion and division were unintentionally created. At a time when we are rightly increasingly aware of and concerned by the negative impact on both the physical and mental health of sections of the population being left behind or excluded from the benefits of a relatively affluent society, reversing this trend is an important and difficult challenge.

Unintended consequences

Seriously damaging unintended consequences of well intentioned initiatives are not restricted just to patterns of development. The disaster of the Grenfell Tower fire is another shocking illustration. The public inquiry into the disaster is still in progress, so my comments are necessarily provisional, but the evidence that has been taken to date, as well as the findings of the inquiry's Phase 1 Report, paint a very disturbing picture of systemic failure of the systems supposedly designed to protect people from the horror which engulfed Grenfell Tower on that June night in 2017.

The tower block was one of those built in the post-war era, and by the early 21st century was clearly in need of renovation. Like many other buildings of its time, not just in the public sector, it had been built without much thought to its energy performance. It was the product of an era of cheap and plentiful energy. So improving the energy efficiency of the building with enhanced thermal insulation was a significant objective of its refurbishment. That should have been a real benefit to households on low incomes who struggled to keep their flats warm in winter, as well as contributing to the reduction of carbon emissions. Good intentions, but herein lay the seeds of the disaster; because in the course of covering the building with a new layer of insulation and cladding, the fire safety of Grenfell Tower was fatally compromised.

Nor was it alone; there are literally thousands of buildings all over the country which have been found in the aftermath of the Grenfell fire to have similar defects which pose a serious risk to residents. Not only was Grenfell not alone, but it was also subject to not just one failure. As the Grenfell Tower Inquiry has progressed it has uncovered a series of blunders, and, it appears, in some cases deliberate decisions to subordinate safety to cost saving, which led to the disaster.

The design of the block's refurbished windows and their re-positioning in relation to the external wall compromised the fire-stopping which should have prevented it spreading from one flat to the rest of the building. Compartmentation to restrict the spread of fires in multi-occupied buildings has been

an integral part of fire safety planning for generations, and the Fire and Rescue Service's 'stay put' policy, which proved so mistaken in the case of the Grenfell fire, is based on the assumption that fire-stopping will be effective. But as the inquiry's Phase 1 Report demonstrated, the compartmentation at Grenfell Tower had been undermined by the way that the windows were relocated in relation to the block's exterior walls, and the problem was compounded by the materials used in the new cladding system.

'**One key element in the process has been the dismissive and often pejorative attitude expressed about regulation by an increasingly numerous and vocal body of opinion formers and influencers**'

The evidence that has been given to date to the inquiry suggests fundamental failings in the specification of the materials used for insulating and cladding the tower, and the basis on which these were presented as complying with the Building Regulations. Neither the client, the main contractor, nor the material suppliers come out well from what has been evidenced to date, but we must await the inquiry's conclusions before we can be confident where the main blame should be laid. Similar considerations apply to the local authority, whose building control service was responsible for confirming compliance with the Building Regulations.

To compound the disaster, the way the building performed on the night of the fire demonstrated a further series of failures of internal fittings, materials and systems which should have helped to keep residents safe, including doors not withstanding fire for the expected period of time, and escape routes being choked with smoke. And as noted the Fire and Rescue Service's 'stay put' policy proved disastrously inappropriate on the night. So right through the process, from initial design through procurement and construction to the management and maintenance of the property and the response of the London Fire Brigade on the night of the fire, the rules, systems and safeguards which most people in the country believed were providing effective protection proved catastrophically flawed.

Why should there have been such a systemic failure? A definitive answer will, again as noted, have to await the conclusions of the Grenfell Tower Inquiry, but I have no doubt that one key element in the process has been the dismissive and often pejorative attitude expressed about regulation by an increasingly numerous and vocal body of opinion formers and influencers. Over the past three

decades at least, I have been struck by the number of occasions on which I have encountered forceful arguments being advanced by people in positions of great responsibility that deregulation is in itself a good thing.

As already observed in relation to the decline of the private rented housing market, over-heavy or ill-targeted regulation can indeed have undesirable consequences. Regulation should always be proportionate. And it certainly should be implemented scrupulously. But the idea that regulation is inherently undesirable and should be swept away wherever possible is both misguided and dangerously complacent. While some, indeed probably the majority of people will continue to do the right thing in a deregulated free-for-all environment, others will not, and will subordinate issues of health and safety to financial interests. One of the clear lessons which we should take from the Grenfell disaster is that the combination of, on one hand, a cynical business culture, focused on cost-saving and competitive advantage rather than public safety, and, on the other, ineffective regulatory powers and structures is toxic.

'**It hardly seems a great triumph when, around 150 years after we, as a society, began to introduce regulations with the aim of safeguarding people's health, we are celebrating a decision by the government to outlaw homes being created without windows'**

Relaxation of the permitted development regime

Unfortunately, this toxic combination is not limited to fire safety issues. It is all too evident across a wide swathe of housing and planning policy, with serious consequences for the health and wellbeing of large numbers of people. One of the more depressing illustrations is the spread of permitted development rights (PDRs) over recent years. The planning system has always recognised that certain categories of small and uncontroversial developments, such as modest extensions to existing homes, should not be required to go through the whole planning process to secure permission. So PDRs were created to enable applicants seeking approval for relatively minor and uncontroversial works to short-circuit the full planning process. However, in recent years the government has seen PDRs as a clever device to deregulate the planning system.

This has been achieved by extending the categories of development benefiting from PDRs from small-scale home extensions to cover a much wider range of developments, including large-scale conversions of former commercial or office space to residential use, and the addition of two whole storeys to be built on top of existing structures. What was presented as a way of getting more homes built by removing regulatory controls has in reality opened up a loophole allowing poor-quality, cramped and unhealthy places to be created, which are then overwhelmingly occupied by poor people without choice.

The widespread use of these shoddy, sub-standard conversions as temporary accommodation for the homeless speaks volumes about the operation of the housing market. Those with choice would not touch them with the proverbial bargepole. Those without choice are placed there, often miles away from their former home area, with no redress. If they quibble about the conditions, they are reminded that the alternative is not a better offer but a return to the streets. For by refusing an offer of housing, they would risk being categorised as intentionally making themselves homeless (and therefore not eligible for further rehousing).

Eighteen months ago, I visited a former industrial building in Watford, whose owner had proposed a permitted development conversion to create 15 very small new homes, six of which were located on a mezzanine floor, underneath the existing corrugated roof, with no windows. When the local authority refused to allow the scheme to proceed the developer appealed to the Planning Inspectorate, who, while expressing concern at the absence of light, confirmed that under the permitted development regulations it had no discretion to refuse the development.

Now, to be fair, the resulting media coverage and political furore prompted the government to amend the regulations to require the provision of natural light in such developments. But it hardly seems a great triumph when, around 150 years after we, as a society, began to introduce regulations with the aim of safeguarding people's health, we are celebrating a decision by the government to outlaw homes being created without windows. Of course, had there been no expansion of PDR, it would not have been necessary to make it clear that such types of home should never be created.

Healthy Homes Act

It is against this background of a progressive erosion of regulatory standards that the TCPA, which I am privileged to serve as President, felt the need to launch a campaign for new legislation – a Healthy Homes Act – to ensure that the homes we create are truly fit for purpose and make a really positive contribution to improving people's health and wellbeing. A proposed Healthy Homes Bill, launched last year by the TCPA, sets out the principles which should define a decent home, and the mechanisms which should be put in place to ensure that they are reflected in all new housing and in the development of new communities.[1]

Permitted development conversion site in Watford – **a product of the continuing erosion of regulatory standards**

The Bill starts by placing a duty on the Secretary of State to promote the health, safety, wellbeing and convenience of people in and around buildings. It then seeks to define the principles which should underpin this objective. All new homes must:
- 'be safe in relation to the risk of fire';
- 'must have, as a minimum, the liveable space required to meet the needs of people over their whole lifetime, including adequate internal and external storage space';
- 'must have access to natural light in all main living areas and bedrooms, and their surroundings must be designed to be inclusive, accessible, and adaptable to suit the needs of all';
- 'should be built within places that prioritise and provide access to sustainable transport and walkable services, including green infrastructure and play space';
- 'must secure radical reductions in carbon emissions in line with the provisions of the Climate Change Act 2008';
- 'must demonstrate how they will be resilient to a changing climate over their full lifetime';
- 'must be built to design out crime and be secure';
- 'must be free from unacceptable and intrusive noise and light pollution';
- 'must minimise and not contribute to unsafe or illegal levels of indoor or ambient air pollution'; and
- 'must be designed to provide year-round thermal comfort for inhabitants'.

These are not utopian objectives. Most have been reflected in the Building Regulations which have sought to ensure proper standards in buildings, but which, as the Grenfell disaster has so painfully exposed, have failed to achieve their objective and have been too easily evaded or misinterpreted. It is a sobering thought that it is now more than 100 years since, in the aftermath of the First World War, the Tudor Walters Report set out a series of standards to guide post-war reconstruction – standards which in certain respects are higher than those applicable today. It is more than 60 years since the Parker Morris report updated those standards for the post Second World War era, and 40 years since, in the cause of deregulation, those Parker Morris standards ceased to be mandatory.

This is the background against which the TCPA is seeking to secure legislation which would enshrine minimum standards in law and make clear our commitment to the development of homes and communities which genuinely promote the health and wellbeing of their residents.

Of course, legislation is only as good as the mechanisms designed to put it into effect, so the Healthy Homes Bill does have some important provisions to ensure effective implementation. In addition to a duty on the Secretary of State to promote the health, safety, wellbeing and convenience of people in or around buildings, he or she is also required to lay before Parliament a policy statement showing how he or she intends to give effect to the healthy homes principles, and an annual report on progress with their implementation. Ministers and relevant public authorities are required to have regard to these principles when making, developing or revising policies, or when discharging their responsibilities under the relevant planning, building or public health legislation. The purpose is to create greater clarity about the standards which must be delivered to ensure that we are creating healthy homes, and greater transparency about how the

healthy homes principles are being translated into practice.

The Healthy Homes Act campaign has to date attracted the support of a wide range of organisations across a variety of different disciplines and interests. Having said that, I would be naïve if I did not recognise that the scale of the challenge is huge, and a Healthy Homes Act is unlikely to be reaching the statute book in the near future. It is, however, generating a lot of attention and helping to demonstrate the common interests between those like myself whose career has largely been focused in the field of housing, and those who have been primarily focused on issues of health and medicine.

It is worth remembering that the Minister responsible for the creation of the NHS, Aneurin Bevan, was also the Minister responsible for housing. The two were seen at that time as intrinsically connected, and I hope that the campaign for the Healthy Homes Act will help consolidate those connections.

Personal choice and the public interest

There is one further dimension which needs exploring here: the tension between personal choice and the wider public interest, if our society is to be successful in promoting healthier and more sustainable lifestyles. This challenge is a very familiar one which applies across a huge range of activities, including diet, exercise, smoking, and alcohol consumption, but there are important dimensions relating to the design, development and occupation of buildings. For example:

● NIMBY opposition to development in areas designated for new settlements or major expansion remains a significant obstacle to new housing being built, even when there are overwhelmingly powerful arguments in favour of that housing, and even when it has been planned and designed in an exemplary way. The obvious question that this poses is how far should we be overriding the private interests of existing residents who want to protect the amenities that they currently enjoy and see as threatened by new development, so that we can meet the interests of those who are without adequate accommodation and desperately need the option of a decent home.

● Secondly, it has proved very hard to incentivise the public to improve the energy performance of their homes to reduce carbon emissions. As a simple illustration, people would generally prefer to add a conservatory to their home, even though this will probably increase their energy usage, rather than install energy-saving technology or improve the thermal insulation of their existing home. Yet without real reductions in domestic energy consumption, we will seriously struggle to meet the country's carbon reduction commitments.

● And thirdly, as the number of 'gated communities' and the proliferation of 'poor doors' in mixed-tenure urban developments has shown, people

with the means to exercise choice in their housing often seek to keep themselves apart from others with lesser means. But this inevitably reinforces social divisions, and in many cases leads to resentment at being excluded from the benefits that others enjoy.

These are just three examples among many which illustrate the difficulties that face planners and developers seeking to expand the supply and improve the quality of our housing stock. These are very real and difficult challenges. How far is it acceptable to put constraints on individual choice and preference about where and how people can live?

Of course this mirrors the tensions which we have seen in attitudes towards the COVID-19 pandemic, with some commentators decrying restrictions as unjustified attacks on individual freedom, and others arguing that faced with such a pandemic individual freedoms must to a degree be subordinated to the wider public interest. I place myself firmly in the second camp, but recognise that this is not a simple, black and white issue. Those of us who have lived through a good part of the 20th century are all too aware of the appalling consequences that can follow the subordination of individual freedom to the supposed higher public interest when the latter is being defined by an autocratic regime unconstrained by appropriate checks and balances. The democratic safeguards that our country has enjoyed for the past 300 years or more are clearly crucial to public acceptance of a framework which will, to a proportionate degree, restrict individual freedoms in the wider public interest.

Lessons from exemplary development

But rather than be drawn further into a philosophical debate which has fascinated humanity for at least two and a half thousand years, I will end with a more down-to-earth story about a housing development in London where my wife and I live and which I had a role to play in getting off the ground. Greenwich Millennium Village stands on the site of what was in the mid-19th century the largest gasworks in the world. By the late 20th century it had become an abandoned and foully polluted ex-industrial wasteland. The opportunity to transform such a site into an exemplary new development arose at the time I was elected as MP for Greenwich, and took a big step forward in 1997 when the newly elected Labour government in which I served as a Minister selected the site as the first of its 'millennium communities', designed to set new standards of urban regeneration.

The objectives embraced all three pillars of sustainable development – economic, environmental, and social. So, it aspired to be a mixed community, providing a range of homes to buy or rent, without there being any visible difference between market and social housing, with the different tenures being 'pepper-potted' across the whole site. It aimed to

Paul Wilkinson on Flickr. CC BY 2.0

Part of Greenwich Millennium Village

meet the highest environmental standards, both to reduce carbon emissions and enable people to keep warm in winter without undue expense. Indeed, its success in this respect is evidenced by the fact that we have felt the need to turn on the heating on no more than a dozen days in all of the past five winters.

The village was planned with excellent public transport links. It is served by seven different bus routes, connecting in all directions, and providing easy access to surrounding employment and leisure locations without car-dependency. A new primary school and health centre were included in the plan, and opened so as to be accessible as soon as the first residents began to move in. The large hole in the ground left by the removal of millions of tons of industrial waste was brilliantly landscaped as a lake, with an adjoining ecology park, which remains funded to this day under the development agreement.

We love living there, and are only sorry that the very positive lessons from this development have not been more extensively translated into developments elsewhere. It is, to me, yet one more illustration of a very British tendency. We can so often be brilliant

innovators, but are much less good at turning great ideas into successful mass production, and at sustaining successful new initiatives over the long term, so enabling the benefits to be shared more widely. This helps explain the difficult question of why, despite all our remarkable scientific, technological, medical, cultural and design achievements, we remain such an unequal society, in which far too many of our fellow citizens still live in squalid and unhealthy housing or lack any roof over their head. I only hope that future generations are more successful than ours has been at tackling and overcoming this challenge.

● **The Rt Hon. Nick Raynsford** *is a former Minister for Housing and Planning. He is the President of the TCPA and led the Raynsford Review of Planning in England. This article is based on his lecture given before the Harveian Society of London on 14 April 2021. The views expressed are personal.*

Note

1   Information on the campaign for a new Healthy Homes Act is available from the TCPA website, at www.tcpa.org.uk/healthy-homes-act

seizing the political moment –
regulating the built environment through a healthy homes act

The Healthy Homes Bill drawn up under a campaign initiated by the TCPA offers an almost ready-made practical way of guaranteeing that new homes would be health-supporting and of high quality, as Daniel Slade explains

Some things never change, and sometimes it is the feeling that things never change which never changes. Writing in these pages in 2005, Colin Ward recounted:

'People with any particular reform or social change to advocate devote enormous energy to lobbying our legislators, and usually a less than ideal version finally emerges. Arthur Koestler used to tell the tale of the bewildered friend who asked him: 'Whose boots have I got to lick next?' It is profoundly dispiriting to be obliged to fight the same battle all over again with a different set of power-holders.'[1]

Anyone who has worked on national planning policy in England for more than a couple of waves of reform will recognise this sense of déjà vu – and the TCPA's fight for high-quality places and homes will probably continue forever. But some things *do* feel unique about this political moment. Processes are accelerating and balances are tipping in at least three important ways.

Real planning reform

Most obviously, we stand at the verge of a major round of pro-market planning reform. Planning reform itself is obviously nothing new (since 1997 there has been, on average, just under one planning-related legislative change every two years[2]), and

governments can be prone to exaggerating the scale of their initiatives (at least until the backlash begins). But the government's pseudo-zonal proposals do look likely to bring about systemic change.

It remains worryingly unclear how standards relating to health, place-making or climate change will be applied to planning and delivering new homes. Indeed, the recent expansions of permitted development rights (PDRs) seem to have hollowed out any new standards before they have even been introduced. And this is another important difference this time around: we are heading into an important battle for the future of the planning system having in a sense already lost the war. The deregulators have been pulling at the thread of PDRs since 2013, and have now more or less unravelled the whole of the planning system when it comes to controlling land use in city, town and village centres. If expanded PDRs are here to stay, much of the debate about the standards that a new system would put in place is rendered pointless.

Battle lines

Viewed from a distance, the battle lines drawn up around PDRs and the forthcoming reforms have taken familiar shape. Mirroring the response to the coalition government's 2010-2012 reforms, the two most powerful camps are categorised by some as a
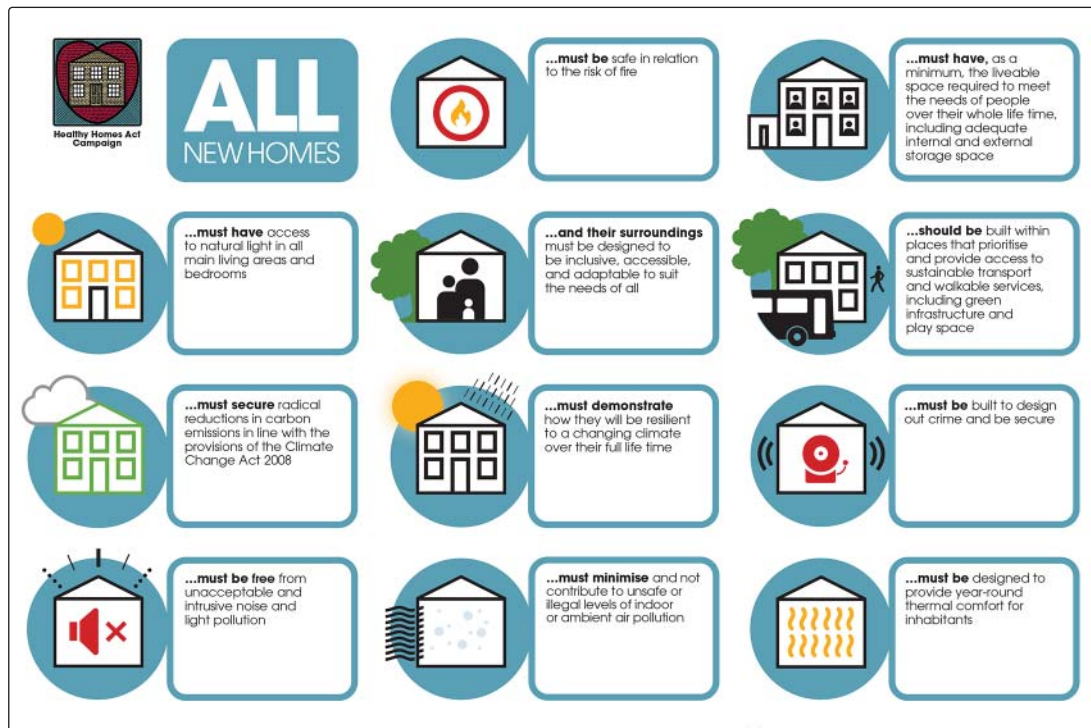
Summary of the healthy homes principles
This infographic describes the principles in abridged form; a high-resolution version is available from the Healthy Homes Act campaign pages of the TCPA website, at www.tcpa.org.uk/healthy-homes-act
Amplification of the principles can be found within the Explanatory Notes attached to the Healthy Homes Bill, available from www.tcpa.org.uk/healthy-homes-act

mix of government free-marketeers, think-tankers (often opaquely funded), and developers with vested interests on one hand; and an awkward alliance of suburban upper-middle-class property-owners, Tory backbenchers and conservationists on the other. As ever, this polarisation forecloses real debate, and leaves campaigning organisations in the difficult position of having to align with one of these two camps if they want to draw on their political clout.

But once again something about the dynamic has changed. There is a feeling that a balance has tipped: once impartial and evidence-based think-tanks such as the Centre for Cities now seem to be firmly in the deregulationist camp. Meanwhile, the increasingly vocal 'YIMBY' groups that have sprung up around the issue are tapping into generational resentment to portray the discourse as a straight shoot-out between solving the housing crisis and NIMBYism – if you are in favour of strong regulation, you *must* be in favour of unaffordability and lower housing delivery. A combination of better policy, stronger regulation and more homes apparently is not an option.

Furthermore, in the political economy sitting underneath all of this, there seems to have been a realignment: unlike many measures taken to boost housing supply in recent years, the large housebuilders have not been vocal supporters of the expansion of PDRs, with the Home Builders Federation being

outright critical. Instead, there has been a more opaque and diffuse mixture of investment firms and landowners speaking in favour.[3]

The government
Another defining feature of this wave of planning reform is how little real dialogue there has been between government and the planning sector. The government's dismissal of the responses it received to its recent 'Class E' PDRs expansion,[4] and previous publication of Dr Ben Clifford *et al.'s* Ministry of Housing, Communities and Local Government (MHCLG) funded research on the dreadful housing outcomes office-residential permitted development,[5] produced on the same day as another expansion of PDRs, are perhaps the most obvious examples.

This disconnection may be, again, nothing new in itself. But it has been worsened by a series of accelerating processes. Power has been moving towards the centre even within central government – principally to No. 10 and the Treasury – and away from departments such as MHCLG since the Thatcher era.[6] This has entrenched the deregulatory 'Treasury view' of economics in government, and has severed connections between key decision-makers and all but a narrow range of stakeholders in the sector.[2] Over the same period, governments have increasingly questioned whether civil servants

should be involved in policy-making, and senior officials have moved from being involved in the 'what' of policy delivery to just the 'how' as a result.[7]

The combined effect of these changes is a government that seems institutionally incapable of receiving real policy feedback and input from the wider sector, and is firmly locked into a particular 'Treasury view' of development and economics. The political scientist Jeremy Richardson predicted in 2017[6] that this limited flow of information between Westminster decision-makers and outcomes on the ground would result in an increasing risk of serious policy failure. That now feels prescient. The coalition government represented a milestone in the erosion of Civil Service power (through Civil Service reforms that were rolled out in tandem with its planning reforms),[7,8] but recent decisions on planning, the pandemic and other policy areas suggest that the Johnson government is displaying new levels of centralism, disconnection from the sector, and commitment to the 'Treasury view'.

The Healthy Homes Bill and how it works

There is another crucial difference to this wave of reform: this time the TCPA and its allies have a specific, practical, legislative proposal which would guarantee the delivery of high-quality homes: the Healthy Homes Act.[9] The proposed Healthy Homes Bill drawn up as part of the campaign for a new Act offers a clear alternative to our currently broken approach to regulating the built environment. Enacted, it would be genuinely transformative. Most significant are its provisions relating to new duties on the Secretary of State for Homes, Communities and Local Government and a series of 'healthy homes principles'.

'**The proposed Healthy Homes Bill offers a clear alternative to our currently broken approach to regulating the built environment. Enacted, it would be genuinely transformative**'

The Bill introduces a duty on the Secretary of State to secure the health and wellbeing of residents of new homes and neighbourhoods:

'It is the duty of the Secretary of State to secure the health, safety, wellbeing and convenience of persons in or about buildings and of others who may be affected by buildings or matters connected with buildings.'

This duty is the Bill's fulcrum and opening bracket, and it has several effects which are important for how the rest of the Bill functions. Most significantly, it moves England from an approach to regulating the

built environment that is predominantly focused on the mitigation of harm to an approach that is about the active promotion of health. And, in applying to the Secretary of State, rather than a particular set of regulations or policy regime, the provision cuts across the housing system, planning system and other areas of built environment regulation (such as those relating to major infrastructure) to unify them under a common purpose for the first time.

Secondly, the healthy homes principles which are to be embedded in primary legislation (see the infographic on the preceding page) comprehensively define what is meant by a healthy home or neighbourhood. Although developed using a series of expert working groups, some of the principles are so essential – basic, even – to people's wellbeing that very many people would be shocked to find that most are not currently guaranteed in laws or fixed standards. They cover the structural and/or material attributes of homes, such as access to natural light, thermal comfort and space requirements, alongside external 'place-level' attributes, such as walkable neighbourhoods and access to green space.

These principles shape new development through two routes. The primary route is via policy. The Bill requires that the Secretary of State bring forward a 'policy statement' explaining how the government will change relevant national policy and guidance so that it supports the delivery of the principles – affecting the National Planning Policy Framework, practice guidance and model design codes, as well as Building Regulations and other policy relating to housing. This would require difficult joined-up policy work to be carried out between central government teams and programmes that are currently heavily siloed. But that, to a great extent, is the point. These principles would then cascade down through the policy hierarchy, to influence planning and housing policy at the strategic and local levels.

The other route through which the principles would end substandard development is more immediate. Because the principles sit in primary legislation (rather than policy or guidance), people would have strong grounds to challenge any planning policy or decision which fails to meet them. In this way, the Healthy Homes Act would effectively outlaw new homes that fail to support their residents' health and wellbeing.

The Bill does not prescribe particular standards or metrics for each of its principles: this is a task it leaves to government in the preparation of its policy statement. This was in part a tactical decision (to avoid disagreement on matters of detail derailing agreement on overarching, fundamental principles), but it also means that any standards developed would be the *government's own*; and it opens the way for the myriad campaign groups pushing for higher standards in different policy areas to see the Healthy Homes Act as a way of achieving their own objectives. The Act would transform the framework within which we regulate the built environment in

England; others may be better placed than the TCPA to identify and describe specific standards.

In the TCPA's view the most powerful case for a Healthy Homes Act is ethical. It lies with those many hundreds (mre likely thousands) living in the modern slums created through PDRs, and whose lives have been worsened by an underpowered planning system. It is a grim truth that this is not something that many in power agree with. But the Bill also aims to simplify and join up the overcomplicated housing and planning systems by reorientating them around clearly defined principles (surely something we can all agree on), reducing the burden on England's public health systems and NHS as one of its beneficial outcomes.

From Bill to Act – capturing the political moment

Returning to the current political moment, it is certainly one of great uncertainty and risk for all who are campaigning for a more humane planning system. But the realignments and evolutions described above also present a chance to change the status quo, and, with that, a real opportunity to make a Healthy Homes Act a reality.

First, and practically, we have a chance to amend the government's planning reform legislation with clauses from the Healthy Homes Bill. Opposition and backbench amendments rarely succeed in the best of times, but the Bill's duties and principles provide the government with a way of heading-off backbenchers' concerns about a low-quality development 'free for all' under the new system, while also simplifying it. There may be a political chasm between those concerned about housing quality and those concerned about housing quantity, and sectoral dialogue with the government may be at a low ebb, but the Bill presents a powerful political olive branch.

Secondly, while the campaign has always been about more than extended PDRs, outrage over PDRs' impacts has often been its 'fuel'. So far, it has gained important concessions from the government on PDRs and space standards (Nationally Described Space Standards will soon have to apply to all new permitted development homes), access to natural light (although, as Ben Clifford describes elsewhere in this journal,[10] the government's implementation of this has led to some perverse outcomes), and unsuitable locations (recent changes to the regulations have given local authorities more power to refuse prior approval where the resulting homes would be too close to logistical or industrial hubs). These changes should improve thousands of lives, but they are nowhere near enough.

As permitted development's impacts on places and lives become even more immediate and visual, the case for minimum standards on all aspects of the built environment that affect our health can only grow. If the government is unwilling to listen to reasoned evidence, visceral imagery of permitted development's outcomes will surely shape public opinion and have an effect.

Reflecting again on Colin Ward's comments quoted in the opening to this article, it is true that legislative lobbying rarely results in success; and when legislation does make it to the statute books, its final version is often 'less than ideal'. But these *are* different times, for good and for bad. And while it is far from perfect, the Healthy Homes Bill's most powerful feature is that it provides a genuine, almost ready-made alternative to the current system. It is tangible evidence that a better, fairer system is both practical and possible, and that deregulation or 'NIMBYism' are not the only options before us as we enter yet another round of planning reform.

● **Dr Daniel Slade** *is Policy and Projects Manager at the TCPA. The views expressed are personal.*

Notes

1 C Ward: 'Travelling space'. *Town & Country Planning*, 2005, Vol. 74, Jan., 6

2 D Slade: *The Making of the National Planning Policy Framework: An Investigation into the Practices and (Post) Politics of Doing Pro-market Planning Reform in the UK Central State.* PhD Thesis. School of Environmental Sciences, University of Liverpool, 2018. https://livrepository.liverpool.ac.uk/3017471/

3 As, for example, at the Oral Evidence Session of the Housing, Communities and Local Government Committee Inquiry into Permitted Deevlopment Rights, on 17 May 2021– see https://committees.parliament.uk/event/4548/formal-meeting-oral-evidence-session/

4 *Consultation Outcome. Supporting Housing Delivery and Public Service Infrastructure: Government Response.* Ministry of Housing, Communities and Local Government, Mar. 2021. www.gov.uk/government/consultations/supporting-housing-delivery-and-public-service-infrastructure/outcome/supporting-housing-delivery-and-public-service-infrastructure-government-response

5 B Clifford, P Canelas, J Ferm, N Livingstone, A Lord and R Dunning: *Research into the Quality Standard of Homes Delivered through Change of Use Permitted Development Rights*. University College London and University of Liverpool, for the Ministry of Housing, Communities and Local Government, Jul. 2020. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/902220/Research_report_quality_PDR_homes.pdf

6 J Richardson: 'The changing British policy style: From governance to government?'. *British Politics*, 2018, Vol. 13, 215-33

7 D Richards and M J Smith: 'The Westminster model and the 'indivisibility of the political and administrative elite': A convenient myth whose time is up?'. *Governance*, 2016, Vol. 29 (4), 499-516

8 K Dommitt and M Flinders: 'The centre strikes back: meta-governance, delegation, and the core executive in the United Kingdom, 2010-14'. *Public Administration*, 2015, Vol. 93 (1), 1-16 (published online: Sept. 2014). https://onlinelibrary.wiley.com/doi/full/10.1111/padm.12121

9 Information on the campaign for a new Healthy Homes Act is available from the TCPA website, at www.tcpa.org.uk/healthy-homes-act

10 B Clifford: 'The ongoing saga of permitted development in England and the continuing need for healthier homes'. *Town & Country Planning*, 2021, Vol. 90, May/Jun., 192-97

the good home – a foundation for human flourishing

Nigel Crisp explains why he is promoting the principles of the Healthy Homes Bill in the House of Lords

In housing quality should not be an optional extra

What do you see as the foundation for a decent life? What is required for each of us to be able to build our own life in the way that we want, fulfilling our potential, and being all that we can be? The ancient Greeks had a word for this goal – *eudaimonia*, or human flourishing. What do we need to flourish?

We might begin our answer with the basics – food, shelter, and safety – or compile a longer list including family, home, community, education, employment, health, freedom, security, and safety. We might, of course, add the arts, social media, grunge music, football, and fashion according to taste. But wherever we start, housing will surely be part of that list and linked with almost all the others.

The current position with housing in the UK is patchy at best. There are shining examples of good design and of new healthy villages and towns being developed. Many housing associations, local councils and others are determined to create the homes, communities and towns of the future. But not enough new housing is being created, and far too many new homes are very small and built to a poor standard. Many are built without sufficient regard to services and facilities and the need to create and support communities. And some office and other conversions created under permitted development rights are shaping up to be *the slums of the future* in the words of one recent report.[1]

Other recent studies, from the political right and left, have shown that existing policy is simply not

improving a difficult and complex situation, and in some cases it is making it worse. Most young people can barely afford to rent, let alone buy property. There are still too many homeless people with no long-term solutions in sight. We need massive investment in renewable energy and improved insulation in order to mitigate the impacts of climate change. Developers hold enormous land banks which could be used much more quickly. The incentives within the whole construction industry are geared towards cutting costs and reducing quality and thereby endangering safety. The awful tragedy of the lives lost in Grenfell Tower has revealed poor materials being used throughout the country, and as a result thousands of people now have unsaleable homes and increasing debts in one of the greatest scandals of our time.

We clearly need a new and comprehensive approach that goes beyond changes in planning regulations and other technical and piecemeal solutions. The Healthy Homes Bill,[2] which proposes that all housing developments must promote health, safety and wellbeing, is just a part of such an approach; but, if we accept this vision for the future, much else will follow.

Good health and good housing go together and, even leaving aside Grenfell, there is plenty of evidence of the damage that poor housing does to our health, safety and wellbeing through the effects of damp, cold, pollution, noise, and unsafe conditions. Poorly planned housing developments can also increase loneliness, which, when it becomes social isolation, is associated with increased risk of dementia. It is estimated that poor housing costs the NHS about £1.4 billion a year.

The current housing stock is poorly adapted to the needs of some groups in the population. A recent study, for example, suggested that around 2 million older people are living in unsuitable housing.[3] And I know from my own experience of reviewing bed occupancy in acute adult mental health institutions that many people are admitted because of a lack of suitable housing and/or have their discharges delayed for the same reason.

All these were powerful arguments for giving priority to new housing policy even before COVID-19 reminded us so powerfully of the divisions in our society. The pandemic has demonstrated that inequalities in housing, employment conditions and income, as well as between ethnic groups, affected our chances of getting the virus and, ultimately, of living or dying with it. Lockdown has been a bitter and lonely experience for many and a relatively comfortable one for others. It has led, among other things, to increased domestic violence and to many children leading unhealthy lives and missing out on education and opportunity.

The government is currently, and quite rightly, focusing on managing the recovery from the pandemic and moving on to a new priority of

'levelling up' society. It has also committed itself to better design and better, more beautiful building, and to finding new ways to improve town centres. However, it has not as yet introduced any practical steps to make this happen. There is a new design code that local planning authorities may adopt if they wish, but no mandatory framework designed to correct the failures of the past and produce the better-quality buildings of the future. The government appears to be relying on deregulation, national target-setting, and private sector enterprise rather than on devolution, local knowledge, and social ambition.

'**We clearly need a new and comprehensive approach that goes beyond changes in planning regulations and other technical and piecemeal solutions... The government appears to be relying on deregulation, national target-setting, and private sector enterprise rather than on devolution, local knowledge, and social ambition**'

There may indeed be some barriers in planning that need to be removed, but planning itself is not the biggest issue. The fact that the number of planning permissions for new homes granted since 2020/2011 is more than a million greater than the number of new homes built in the same period (with the annual number of permissions granted for new homes more than doubling since 2010, and nine out of every ten housing applications granted)[4] is a far bigger bottleneck to progress. Moreover, there are other ways to simplify processes. The Healthy Homes Bill proposes that the duty to promote health, safety and wellbeing should apply to both building regulations and planning controls, thereby unifying two sets of regulations that can be complex and confusing. Taking this as an overarching framework would allow both to be simplified.

Current government proposals which remove almost all control from local planning authorities ignore the importance of communities and place, and the important evidence provided by organisations such as New Local and Well North Enterprises, and my own book *Health Is Made at Home*,[5] all of which show how locally based action and partnerships between the private, public and not-for-profit sectors can improve people's lives, environments, and health.

The proposals also go against other government policy, such as the NHS move towards local 'integrated care systems' and the support for local mayors, which appears to be proving very popular with voters.

It is hard to see how 'levelling up' can happen without local control of place and planning and increased devolution of powers and funding. Central targets and decision-making are 20th-century tools that are poorly equipped to deal with 21st-century problems and populations. Context, localness and the small battalions are more important now than even a few years ago, when globalisation, scale and international best practice appeared to be the markers of success. Both sets of factors are, of course, important.

Putting this another way, quality is not an optional extra. Politicians and public servants will be judged by the public on things that are easy to measure, such as the sorts of standards proposed in the Bill: are new homes of sufficient size, with access to daylight and green spaces, with good noise and heat insulation, and well built?

> **'The Bill is above all about a positive vision of the future. It is not primarily about tackling poor standards, taking remedial action, or addressing the causes of ill-health, but about building homes that are part of the foundation of a positive future, promoting the causes of health and enabling people to flourish'**

I come to the Healthy Homes Bill from a background in health, and see it within the wider context of all the factors that shape our health and wellbeing. Housing is only one of the areas we must tackle in pursuit of human flourishing. I would especially emphasise the need to improve education, and in particular the need to exclude fewer children from school and offer more vocational education. Employment, the economy and jobs are all also vital to create the self-confidence, achievement and prosperity that are part of flourishing.

The Bill is above all about a positive vision of the future. It is not primarily about tackling poor standards, taking remedial action, or addressing the causes of ill-health, but about building homes that are part of the foundation of a positive future, promoting the causes of health and enabling people to flourish.

I had hoped that we could introduce the Bill into Parliament during the current session, but this will not now happen. However, the principles in the Bill already have support from a number of parliamentarians and many external and expert bodies, and we will seek to have its provisions included in amendments to other legislation on planning and building. We will encourage planning authorities to adopt its vision and standards, regardless of what may happen nationally.

The Healthy Homes Bill only applies to new build and conversions of existing property, but its vision, values and principles run much wider. They recognise the importance of housing for our health but also the importance of place and communities. Our health as individuals is intimately connected to the health of our communities, the health of wider society, and, ultimately, the health of the planet.

● *The Lord Crisp KCB is an independent crossbench member of the House of Lords. He was Chief Executive of the English NHS and Permanent Secretary of the UK Department of Health from 2000 to 2006. His latest book, Health is Made at Home, Hospitals are for Repairs, is published by Salus and available from www.healthismadeathome.uk at £9.99 postage free in the UK. The views expressed are personal.*

Notes

1 *Planning 2020 'One Year On'. 21st Century Slums?* Raynsford Review of Planning in England. TCPA, Jan. 2020. www.tcpa.org.uk/the-raynsford-review-of-planning-one-year-on

2 Details of the Healthy Homes Bill and the TCPA's Health Homes Act campaign are available from the TCPA website, at www.tcpa.org.uk/healthy-homes-act

3 *Inquiry into Decent and Accessible Homes for Older People.* All-Party Parliamentary Group for Ageing and Older People, Jul. 2019. www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/appg/appg-for-ageing-and-older-people---report-on-decent-and-accessible-homes-for-older-people.pdf (referencing the *English Housing Survey 2016-17*)

4 'Over 1.1 million homes with planning permission waiting to be built – new LGA analysis'. News Release. Local Government Association, 8 May 2021. www.local.gov.uk/about/news/over-1-million-homes-planning-permission-waiting-be-built-new-lga-analysis

5 N Crisp: *Health is Made at Home, Hospitals are for Repairs. Building a Healthy and Health Creating Society.* Salus, 2020

an ecological framework for the healthy home

Araceli Camargo explains why framing health as an ecological phenomenon is a vital step in creating homes that are places of healing

Bill Branson/National Cancer Institute on Unsplash

The home should be a place of healing

Centric Lab is a neuroscience research laboratory that works to help private, public and third-sector organisations to create strategies to improve public health. Its working definition of health is 'a process that allows our biological systems to come back to homeostasis [i.e. the regulatory process that helps to maintain stability across our biological systems] after experiencing trauma or stress, throughout our entire lifetime, to give everyone an equal opportunity to realise our full potential'. This requires systemic support for our bodies from the wider ecosystem – health is thus an ecological phenomenon.

Framing health as an ecological phenomenon has various benefits. First, it is more accurate than framing

it as the outcome from a series of personal behaviour choices. For example, if a person cannot go for walks in their neighbourhood because they live in an area of high traffic and unsafe crossings, that is not a matter of a personal choice but rather the result of a systemic lack of support.

Secondly, an ecological framing requires us to understand health systemically rather than as an outcome of individual factors. This is important as non-communicable diseases such as obesity are not caused by a single factor, such as not eating healthy food. Environmental pollutants, such as poor-quality air, noise, and lack of light are now being linked to obesity.[1]

Thirdly, an ecological framing allows us to consider how a person's lived experience affects their health.[2] For example, trauma is highly linked to cardiovascular diseases and depression, and so is acute stress during childhood.[3]

A proper understanding of the ecological framework calls for the application of neuroscience. The stress response is one of our main biological responses to both internal stressors (such as a virus) and external stressors (both psychological – such as work insecurity, overcrowding, or experiencing an acute event – and physiological – such as environmental pollutants).[4] The stress response is predominantly mitigated by the hypothalamic-pituitary-adrenal axis (HPA axis) through a series of different hormonal responses which communicate with a wide range of systems, such as the endocrine and immune systems, to help our bodies adapt.[4] The objective of the stress response is to help our body make changes so that we are able to function and then come back to homeostasis. For example, if we are running, sweat keeps us cool – that is the adaptive response to heat.[5]

However, when the stressors become constant and acute, the body's stress response becomes dysregulated (i.e. our bodies can no longer manage adaptation to our environments). This is a phenomenon called allostatic load, which is a key component of the pathology of various non-communicable diseases that are causing a health crisis.[6] If the places that people inhabit and their lived experience within them play a key role in a person's health, then it is imperative that the home is conceptualised as a place of health or as part of a system of healthcare.

'**If the places that people inhabit and their lived experience within them play a key role in a person's health, then it is imperative that the home is conceptualised as a place of health or as part of a system of healthcare**'

Unfortunately, the home is all too often *not* a place of health, especially for those living in inadequate housing (and, of course, those who are forced to live on the streets are without a home at all). These poor-quality homes often have mould, poor sanitation, and poor access to water or electricity; and they are rarely adapted to climate change, while volatile organic compounds may pollute indoor air.[7] Many living in social housing are also experiencing economic pressures and poverty, resulting in mental stress alongside the physical stress resulting from homes being too cold (or too hot) because of energy poverty.[7]

Further stressors from the lived experience of deprivation can include witnessing or experiencing violence, discrimination, overcrowding, and a sense of hopelessness.

There is also the external environment of the home to consider. Many poor-quality homes are located in areas of high traffic with low levels of green infrastructure provision,[8] with concomitant higher temperatures during heat waves and high levels of noise, light and air pollution. In 2019, before the onset of the COVID-19 pandemic, Centric Lab identified wards in London in which a health emergency is developing – areas with high levels of environmental psycho-social stressors, such as inadequate housing and exposure to high levels of environmental pollutants.[9] Through this work we coined the term 'biological inequity' to refer to the experience of living with disproportionate levels of biological stress.[10]

Biological inequity also implies that the distribution is not random, but is due to structural discriminatory factors, such as classism and racism. The COVID-19 pandemic has highlighted this inequity.

In a data study we found that people who are racialised as Black or Asian disproportionately lived in areas of biological inequity, and that this was a key driver in the development of diabetes and obesity, which were identified as COVID-19 co-morbidities (i.e. one or more additional conditions often occurring alongside a primary condition), thus putting them more at risk of acquiring the virus.[7] These communities were also more likely to live in overcrowded homes, facilitating contagion and transmission of the virus.[11] These findings highlight an intrinsic link between health and the home (see Table 1).

It is also important to think about health and the home in the context of COVID recovery. People suffering from long-haul COVID[12] will require long-term healthcare, part of which should be living in a healthy home. Recovering from an illness in a home that is noisy, overcrowded, too cold or too hot, or blighted by air pollution will impose a greater biological burden on the body, which could lead to longer recovery times.[13]

It is imperative that those who work within urban planning look beyond homes as simply matters of amenity, capital value, or aesthetics. Homes play a vital part in healthcare: the home should be a place of healing.

A healing home

If we are to determine what qualifies as a healthy home, a structural definition is necessary. In this article, such a home is defined as a place that offers people equitable access to psychological and physical health support throughout their lifetime. Part of this health support should be being made to feel secure and safe: the home should be a place that helps to

Table 1
Elements of a healing home

Element	Definition	Contributing factors	Link to health
Connection with biodiversity	Access to diverse levels of nature, including birds, insects, and large-scale areas of vegetation	Orchestrated vegetation based on its microbiome Access that is safe, mentally and physically Equitable distribution, to increase exposure opportunity	Ingestion of necessary microbiota that help with digestion, immune health, depression, and anxiety Access to physical activity Mental restoration Reduction of cortisol levels, which helps the body to reduce its inflammatory and stress response[A]
A See, for example, M R Marselle, T Hartig, D T C Cox, *et al.*: 'Pathways linking biodiversity to human health: A conceptual framework'. *Environment International*, 2021, Vol. 150, May, 106420. www.sciencedirect.com/science/article/pii/S0160412021000441			
Equitable mobility	The ability to safely navigate from point A to point B – a person should be able to access their home safely and within a timely manner	Transport systems Good roads Social cohesion Road safety	The ability to access the home in a timely manner allows for more time to be spent with family and community, which are key elements of feeling secure and integrated into society – two pillars of psychological health[B]
B See, for example, *Equitable Urban Mobility*. Centric Lab. www.thecentriclab.com/equitable-urban-mobility			
Reduced noise	Reduction of noise pollution	Mitigation of sources of noise pollution such as construction, traffic, etc. Internal mitigation such as well insulated homes to prevent noise intrusion	Noise pollution has been linked to sleep disturbances, metabolic disorders such as diabetes and obesity, and anxiety. Good noise insulation is thus an essential part of a healing home[C]
C S Geravandi, A Takdastan, E Zallaghi, *et al.*: 'Noise pollution and health effects'. *Jundishapur Journal of Health Sciences*, 2015, Vol. 7 (1), e60312			
Indoor air quality	Reduction of air pollution	Ventilation to bring in fresh air and reduce the amount of pathogens and mould breathed in Use of natural materials not treated with volatile organic compounds that pollute indoor air Construction of homes with non-toxic paint, carpets, and other materials	Clean air is the most essential element for physical health. When we breathe, oxygen is pumped through our entire body to ensure complete biological function of all our organs[D]
D J D Spengler and K Sexton: 'Indoor air pollution: a public health perspective'. *Science*, 1983, Vol. 221 (4605), 9-17			
Adequate space	Sufficient personal space to avoid overcrowding	Adequate partitions, walls, and rooms to ensure safety, privacy, and personal space Third spaces (i.e. non-home or work spaces) that people within the community people can use to ease pressure on the home	Crowded spaces can facilitate the quicker spread of pathogens, as well as exposing people to noise pollution[E]
E A McNicholas, D Lennon, P Crampton and P Howden-Chapman: ' Overcrowding and infectious diseases – when will we learn the lessons of our past?'. *New Zealand Medical Journal*, 2000, Vol. 113 (1121), 453-54			

Table 1 continued
Elements of a healing home

Element	Definition	Contributing factors	Link to health
Outdoor air quality	Reduction of external air pollution, to ensure it that it is not transferred indoors	Well orchestrated biodiversity Equitable mobility	Outdoor air pollution can affect every single organ as it moves throughout the entire body through the blood system. This is one of the key reasons that it is linked to a wide range of non-communicable diseases[F]

F E M Thomson: 'Air pollution, stress, and allostatic load: linking systemic and central nervous system impacts'. *Journal of Alzheimer's Disease*, 2019, Vol. 69 (3), 597-614. https://content.iospress.com/articles/journal-of-alzheimers-disease/jad190015

Element	Definition	Contributing factors	Link to health
Climate adaptation	The home's ability to withstand changing and extreme weather driven by climate change, including hurricanes, earthquakes, floods, heat, wind, and cold	Micro-climate considerations to keep the area around the home insulated from severe weather Structural infrastructure, such as windows, walls, columns, etc., equipped to handle severe weather Updated building codes to match changing weather patterns	There are two health pathways: ● Extreme heat and cold can lead to cardiovascular complications. ● If a home is not adaptable it may lead to displacement and/or homelessness as the home is destroyed. Both factors are linked to an array of diseases such as PTSD, depression, and anxiety[G]

G *PTSD Prevalence in Impoverished Urban Environments*. Centric Lab. www.thecentriclab.com/ptsd-cities

Element	Definition	Contributing factors	Link to health
Fuel equity	Equitable access to energy infrastructure to keep the home thermally safe, lit, and liveable	Homes with the right energy infrastructure Government programmes providing assistance to those who are economically vulnerable	Extreme heat and cold can lead to cardiovascular complications[H]

H K Rodahl: 'Occupational health conditions in extreme environments'. *Annals of Occupational Hygiene*, 2003, Vol. 47 (3), 241-52. https://academic.oup.com/annweh/article/47/3/241/171709

Element	Definition	Contributing factors	Link to health
Hygiene	Ability to keep good home and personal hygiene	Micro- and macro-infrastructure for good hygiene, including access to garbage disposal, plumbing, and the cleaning of communal areas	Avoiding bacterial-/viral-based diseases[I]

I M C Freeman, M E Stocks, O Cumming, *et al*.: 'Hygiene and health: systematic review of handwashing practices worldwide and update of health effects'. *Tropical Medicine & International Health*, 2014, Vol. 19 (8), 906-16. https://onlinelibrary.wiley.com/doi/full/10.1111/tmi.12339

shelter its residents from life's psychological stressors. Finally, as health is a lifelong process, the home should be a constant place of healing, which entails an ability to adapt to a person's changing mental and physical health needs.

Table 1 sets out the elements that should be considered part of a healing home. It is important to note that the equitable availability of healthy homes should be a policy requirement – requiring policies that set and enforce quality standards based on health. Furthermore, capitalist practices that prevent people from accessing healthy homes should also be curtailed at a policy level.

● *Araceli Camargo* is Lab Director and Co-Founder of Centric Lab (www.thecentriclab.com/). The views expressed are personal.

Notes

1 S D Dubowsky, H Suh, J Schwartz, *et al*.: 'Diabetes, obesity, and hypertension may enhance associations between air pollution and markers of systemic inflammation'. *Environmental Health Perspectives*, 2006, Vol. 114 (7), 992-98

2 M Scharoun-Lee, P Gordon-Larsin, LS Adair, *et al*.: 'Intergenerational profiles of socioeconomic (dis)advantage and obesity during the transition to adulthood'. *Demography*, 2011, 48 (2), 625-51

3 S Cyr, M J Marcil, V Long, *et al*.: 'Posttraumatic stress disorder and the nature of trauma in patients with cardiovascular diseases: a case-control study. *medRxiv*, Jan. 2021. doi: https://doi.org/10.1101/2021.01.14.21249762

4 R Murison: 'The neurobiology of stress'. In M Flaten and M al'Absi (Eds): *Neuroscience of Pain, Stress, and Emotion*. Academic Press, 2015, pp.29-49

Table 1 continued
Elements of a healing home

Element	Definition	Contributing factors	Link to health
Safe materials	Home construction materials that are safe from hazardous toxins at any level at any time	Use of natural materials	Many respiratory, cardiovascular and even neurological diseases are linked to hazards such as asbestos, lead, flame-retardant materials, etc.[J]

J   SJ Flora: 'Lead exposure: health effects, prevention and treatment'. *Journal of Environmental Biology*, 2002, Vol. 23 (1), 25-41

Element	Definition	Contributing factors	Link to health
Structural soundness	Structural safety of the entire building, and its ability to withstand changing and severe weather or any other burden	Equitable enforcement of building codes in all buildings	Provision of dignity and personal safety
Navigability	Homes and surroundings navigable to all mobility types	Well functioning options for stairs; Well posted signs; Aides for those with visual disabilities	A disabling environment can make people feel unsafe and curtail their independence. It can also create social isolation, which in turn can lead to feelings of loneliness and anxiety[K]

K   *Equitable Urban Mobility*. Centric Lab. www.thecentriclab.com/equitable-urban-mobility

Element	Definition	Contributing factors	Link to health
Structural economic protection	Protection from price hikes or any other economic changes that would make a person vulnerable to homelessness or displacement	Policies preventing rent spikes that leave people vulnerable to displacement and/or homelessness	Displacement and/or homelessness are both linked to an array of diseases, such as PTSD, depression, and anxiety[L]

L   *PTSD Prevalence in Impoverished Urban Environments*. Centric Lab. www.thecentriclab.com/ptsd-cities

Element	Definition	Contributing factors	Link to health
Clean water	Clean and healthy water – a pillar to all life – equitably accessible to all people at all times	Clean pipes and water infrastructure; Equitable access, and economic subsidies if needed; Appropriate infrastructure to access running water	Clean water provides the infrastructure for good hygiene, which is essential to avoid bacterial-/viral-based diseases, and is also a prime factor in our digestive, metabolic, and endocrine health[L]

M   H Clifford, G Pearson, P Franklin, *et al*.: 'Environmental health challenges in remote Aboriginal Australian communities: clean air, clean water and safe housing'. *Australian Indigenous Health Bulletin*, 2015, Vol. 15 (2), 1-13. www.researchgate.net/publication/283634583_ Environmental_health_challenges_in_remote_Aboriginal_Australian_communities_ clean_air_clean_water_and_safe_housing

5   BS McEwen: 'Physiology and neurobiology of stress and adaptation: central role of the brain'. *Physiological Reviews*, 2007, Vol. 87 (3), 873-904

6   T M Beckie: 'A systematic review of allostatic load, health, and health disparities'. *Biological Research for Nursing*, 2012, Vol. 14 (4), 311-46

7   A Camargo, E Hossain, S Aliko, *et al*.: 'Using an ecological and biological framing for an anti-racist Covid-19 approach'. *medRxiv*, Jan. 2021. doi: https://doi.org/10.1101/2021.01.24.21250397

8   A Camargo and O Lord: *Rethinking London's Red Routes: From Red to Green*. Environmental Defense Fund/ Centric Lab, Mar. 2021. www.globalcleanair.org/files/2021/05/EDF-Europe-Centric-Lab-Rethinking-Londons-Red-Routes.pdf

9   'Declaring London's wards of greatest health risk'. Webpage. Centric Lab, Mar. 2020. www.thecentriclab.com/areas-of-health-emergency

10   A Camargo, E Hossain, S Aliko, *et al*.: 'Neuroscience, urban regeneration and urban health'. *Journal of Urban Regeneration & Renewal*, 2020, Vol. 13 (3), 280-89. https://static1.squarespace.com/static/ 57a5a729414fb58 fa3e0e0a6/t/5e6f4aee8afded74f56a0319/ 1584352000900/ uroscience%2C+urban+regeneration+ and+urban+health.pdf

11   J A Patel, F B H Nielsen, A A Badiani, *et al*.: 'Poverty, inequality and COVID-19: the forgotten vulnerable'. *Public Health*, 2020, Vol. 183, Jun., 110-11

12   J N Aucott and A W Rebman: 'Long-haul COVID: heed the lessons from other infection-triggered illnesses'. *The Lancet*, 2021, Vol. 397 (10278), 967-68

13   M Travaglio, Y Yu, R Popovic, *et al*.: 'Links between air pollution and COVID-19 in England'. *Environmental Pollution*, 2021, Vol. 268, Jan., 115859. https://doi.org/10.1016/j.envpol.2020.115859; and G Loupa: 'Influence of noise on patient recovery'. *Current Pollution Reports*, 2020, Vol. 6 (1), 1-7

healthier homes and the ongoing saga of permitted development

Appalling space standards and lack of access to natural light, fresh air and thermal comfort are just some of the seriously detrimental outcomes of the government's determination to pursue the extended permitted development route to the creation of new homes in England, as **Ben Clifford** explains

Photos: Ben Clifford

A permitted-development change-of-use scheme of what had been a retail unit in Croydon – this is post-conversion and is now somebody's 'home'

And so the saga of planning deregulation in England continues: on 30 March, the government announced that it will introduce a new permitted development right (PDR) for the conversion of commercial buildings from the wide-ranging new Class E use class to residential use.[1] The announcement was

somewhat bizarrely couched in terms of 'new freedoms' that would 'revitalise' high streets and town centres. The highly negative response to the government's pre-implementation consultation on this idea was then published the day after.[2]

Permitted development has existed ever since our comprehensive, statutory system of development control was introduced in 1948, but has traditionally constituted very minor development, such as extensions to the rear of an existing house, and temporary structures. Its expansion to encompass ever more significant forms of development and thus reduce the scrutiny by local planning authorities and the degree of regulatory control that can be exerted over them is a deregulation driven more by ideology than evidence. Following the introduction of the PDR for the conversion of offices to residential uses in 2013, we have seen the introduction since 2015 of PDRs relating to converting retail and various associated *sui generis* uses to residential, agricultural to residential, and storage and light industrial to residential.

Changing the use of buildings is hardly a new phenomenon. In many British cities there are early-19th century buildings near the centre which became less popular as residences in the 1960s and 1970s and switched to office use and which may now be turning back to residential use, the generous space standards and ceiling heights aiding such 'adaptive re-use'. Converting vacant commercial buildings to residential use can help regenerate areas and can be a sensible approach in relation to sustainability, given the embodied carbon in buildings and given that many (but not all) are within existing urban areas with at least some supporting infrastructure already in place.

Alongside sustainability and regeneration factors, other arguments in favour of conversion include the fact that we are generally accepted to need a greater supply of housing in England (albeit the housing crisis is far more complex than the reductive use of overall national supply figures would suggest). Since permitted development was introduced, government data shows that over 72,000 dwellings have been created through change of use rights, and, as the specific data has been collected only since 2015, the number since 2013 will be higher still.[3]

The issue is not, however, that the principle of converting buildings to residential use is wrong. The issue is the way such change of use is governed through the planning system, and the implications of that. In short, the problem is not adaptive re-use; the problem is permitted development as the governance instrument to allow and achieve such conversions. This type of permitted development has had a number of disbenefits which have become quite apparent and can be directly linked to the developments being managed through PDRs rather than full planning permission.

Most serious are the issues related to the quality of the residential accommodation created in so many permitted development schemes. Variously with colleagues at UCL (University College London) and the University of Liverpool, I have collected evidence about some of these issues and examples of very poor commercial-to-residential conversion schemes under permitted development in three reports and a book published between 2018 and 2020.[4] The stand-out issue from this work has been the appalling space standards usually seen with conversions under PDRs.

In our 2018 report, looking across five English local authority case studies, we found that just 30% of the dwellings created through PDRs would meet the nationally described space standards, compared with 94% of the dwellings created through change of use which had been allowed through a full planning permission. In our 2020 report, looking across another 11 English local authority case studies, 22% of the PDR dwellings we examined were large enough to meet the standards, compared with 73% of the planning permission dwellings.

Planning permission units were often only just below the national standards and had sometimes been compliant with slightly lesser, older local standards, or the shortcomings were due to issues discussed in officer reports, such as the difficulties of converting listed buildings. Permitted development dwellings were often significantly smaller – for example studio flats of 15 square metres compared to the suggested minimum of 37 square metres.

In a recent case in Leicester, a planning inspector upheld the council's refusal of a PDR retail-to-residential conversion where a unit would have been just 8 square metres on the basis that this could not count as a dwelling, but a similar attempt in Hounslow to block 18 square metre and 24 square metre office-to-residential conversions on the same basis in 2014 were unsuccessful and overturned by planning inspectors, even though they noted the tiny space necessitated that a bed that could be 'raised up to the ceiling when it was not in use' to allow space for non-sleeping activities.[5]

Space standards matter and have commonly been considered a basic component of decent housing for over a century (featuring in the Tudor Walters report of 1918). At the extreme, lack of space in the dwelling can impact the physical health of occupiers, but more common is the impact on mental health and wellbeing through constraints on everyday life (such as sufficient room to allow a reasonable range of different activities to take place, including work, socialising, cooking, and sleeping). Owing to the housing crisis, there is often a lack of choice for many people over where they live, meaning that many of those inhabiting these tiny 'units' (they hardly seem fit to be called homes) are not there freely. In some cases, there may even be overcrowding with families in these small units, particularly given

the preponderance of studio and one-bed flats in these PDR schemes, divorced from any link to actual local need.

In our 2020 research, we found that space standards were worse for dwellings created through PDR schemes than for planning permission schemes in all of our case study local authority areas, but that they tended to be smaller in more deprived communities. Large office block conversions often also led to many tiny units, compared with small retail unit conversions (the under a 150 square metre overall size limit on retail-to-residential conversions is now increased to 1,500 square metres under the Class E rules).

While the often tiny space standards have been the most notable problem in the quality of residential units created through PDRs, they are not the only issue. There have been issues with natural light, with some units even being created with no windows at all, but more commonly with reduced natural light into the main habitable area of the dwelling through strange, contrived layouts resulting from attempts to maximise the number of new flats carved out of large-floorplate commercial buildings. We reported in 2020 that 72% of the dwellings created under PDRs only had single-aspect windows, compared with 29.5% created through planning permission. Some of these single-aspect conversions were also north facing.

Window aspect was something that we could tell readily from the sort of floorplans usually submitted through the PDR prior-approval process; however, there will be many cases where the issues go beyond this and would include factors such as windows that do not open or are tinted – which might be fine for commercial buildings but are less desirable for residential buildings. Ventilation, and the availability of fresh air, daylight and thermal comfort, can all be issues with implications for the health and wellbeing of the inhabitants.

'While some of these converted buildings are so shockingly bad that even passers-by would notice them, others may be easy to overlook for those not having to endure living in them'

There have also been issues with amenity and outdoor space. In our 2018 research, we had found that just 14% of the PDR dwellings examined benefited from access to private or communal amenity space (such as a roof terrace, garden area, or balcony), while in 2020 we found that just 3.5% of the PDR units benefited from access to private amenity space (such as a balcony), far less than the

rates for dwellings created through planning permission.

The COVID-19 pandemic has served to remind us of the importance of such access for wellbeing, and, while many people might not be so confined to home as the pandemic eases, this continues to be an important issue widely recognised as part of creating good-quality dwellings at higher density. This is compounded by the fact that things such as neighbourhood access to green space and adequate provision of play space in what can be quite large conversion schemes simply cannot be considered through a PDR process, given that it is the very opposite of proactive and holistic planning.

The location of PDR conversions can also be deeply problematic. The majority of commercial-to-residential schemes are in town centre areas which are often suitable for dwellings and with good access to services. Looking beyond averages, however, to the extremes possible under permitted development, there can be dwellings created in the middle of industrial estates and business parks which offer exceptionally poor amenity with potential externalities from neighbouring premises and poor access to shops and public transport. Issues with non-sustainable locations with poor access to services can also be associated with agricultural-to-residential PDR schemes, which have often been overlooked in the story of permitted development as they are not so associated with poor-quality housing but can be deeply problematic in sustainability terms.

While some of these converted buildings are so shockingly bad that even passers-by would notice them, others may be easy to overlook for those not having to endure living in them. Living in more comfortable quarters, it can sometimes be all too easy to forget the conditions of poor-quality residential accommodation that can cause damage to people's health. Powerful testimony from some residents during our research discussed the impact of feeling cut off and suffering from noise from neighbouring uses in unsuitable locations, of overcrowding where families live in one-bedroom flats, and of children having to play in the corridors because of a lack of space in their flats or outdoor or specific play space provision in the former office blocks that they now call home. Lack of adequate accessibility for disabled residents was also raised as an issue.

The residential quality issues are extremely important but are not the only factors that should cause concern about the expansion of PDRs for schemes that create new dwellings. There has been no requirement that the buildings being converted are actually vacant, and while some surplus and empty commercial buildings have been positively re-used through conversion, there are many others than have been at least partially and sometimes fully occupied prior to PDR change of use. This is particularly the case in London and the South East,

An office-to-residential permitted-development conversion on a business park location in Slough

where high housing prices can lead to a push to convert occupied employment space to residential use. Removing such commercial space can negatively impact local businesses if they are unable to find suitable alternative accommodation and can negatively impact the preservation of mixed communities and the fine-grained mixture of land uses which can sometimes make for vibrant urban areas.

There is usually no planning gain to be levied on PDR schemes. They are not generally considered liable for Section 106 contributions (including affordable housing provision), and, even when Community Infrastructure Levy charging schedules are adopted, if the scheme does not create new floorspace it can usually avoid making any contributions. This is highly problematic given that there are different impacts on local infrastructure from residential compared with commercial buildings, particularly with regard to social and green infrastructure. The increase in change-of-use schemes seen when PDRs were extended may be more about the increased profitability resulting from the lack of affordable housing and infrastructure contributions than about the process of gaining planning permission per se having been an insurmountable barrier before 2013.

The nature of nationally defined PDRs also removes the opportunity for local management of the built environment and opportunities for community engagement. Local Plan policies cannot be applied, reducing the scope for any meaningful proactive 'planning' or influence over the location and form of development by local planners. Local communities cannot effectively input into PDR processes, whether this be through Local Plan or development management processes, because they are not subject to local policies and the principle of development has already been established nationally.

Local planners do still have some limited influence over schemes through the pre-set list of technical things being checked through prior-approval processes, but the fee chargeable for this has been laughably small and so, on top of everything else, processing PDR prior approvals is actually reducing the resources of austerity-hit local authorities through lost fees (as well as lost planning gain). Constrained resources, combined with a lack of government guidance on things such as the ability to apply conditions to prior approvals, may be why there has often been poor monitoring of these schemes. In some cases, the scheme built clearly varies from floorplans submitted for prior approval (which can be of shockingly poor quality to begin with). The impacts of developments delivered in this deregulated space may be felt for years to come.

There have been government changes to PDRs and the prior-approval process in recent years. A report I led, published in 2020, was commissioned and funded by the Ministry of Housing, Communities and Local Government to learn more about residential quality issues associated with PDRs. Having received our report, the government acted in June 2020 to require 'adequate natural light' to all habitable rooms created through change-of-use PDRs. It then acted in September 2020 (hours before a key vote on

permitted development regulations in Parliament) to require, from April this year, dwellings created through change-of-use PDRs to meet the nationally described space standards.[6]

Although most people would probably be shocked to find that it had been possible to create dwellings without any windows at all for seven years, these additional safeguards are welcome, and the minimum space standards should go some way to mitigating the worst of PDRs. The issue of the lack of planning gain contributions was acknowledged in the Planning White Paper, with a proposal that at some undefined time in the future these PDR conversions would need to make contributions to the new consolidated Infrastructure Levy.[7]

These policy developments are not, however, sufficient to ensure that we will always be creating healthy homes through PDRs. Other issues, such as access to outdoor and play space, remain and are important for what can be large conversions creating multiple dwellings. I have also already seen a proposal under the upward-extension PDR in which the requirements for 'adequate natural light' would be fulfilled by having skylights and lightwells into some flats, but no windows which can open, or which you can look out of at all. This would potentially meet the narrow requirements of the prior-approval process but would clearly be quite problematic, with issues of ventilation and the impact on people's wellbeing from not having a view of the outside world from any part of their flat.

'I have also already seen a proposal under the upward-extension PDR in which the requirements for 'adequate natural light' would be fulfilled by having skylights and lightwells into some flats, but no windows which can open, or which you can look out of at all. This would potentially meet the narrow requirements of the prior-approval process but would clearly be quite problematic'

Our current system of case-by-case planning permission would be able to stop such conversions because of typical Local Plan policies on creating new residences that provide a satisfactory living environment. The more narrowly defined prior-approval process could not. A real advantage of our system of

planning permission is the ability of a local planner to take a more holistic view of the scheme and see, all things considered, whether or not it is acceptable. This just is not possible under permitted development.

Other countries with more as-of-right or zoning-type planning systems do have processes more akin to PDRs for approving individual schemes, without the case-by-case discretion typical of planning in the UK. However, they also have much more sophisticated fixed standards than our prior-approval process. As my colleague Manuela Madeddu has highlighted, in Italy the fixed and non-negotiable standards which apply to residential development there would prevent many of the conversion schemes that we have seen in England being allowed at all, as they would be unable to comply with the much more rigid safeguards in place.[8]

Precisely because we have a tradition of being able to take a holistic case-by-case view of the merits of a scheme through our system of development management, we do not have a sophisticated system of fixed standards to ensure that satisfactory living environments are created through the PDR process. The prior-approval process has evolved, but it would still have a long way to go to ensure healthy homes, and this is one reason why some of the proposals from the August 2020 Planning White Paper are so concerning – similarly, the recent government announcement to create a new Class E to residential PDR. Without a much more sophisticated system of minimum standards enforced through Building Regulations and planning processes, PDRs will always be problematic.

I am currently working with colleagues at UCL's Centre for Advanced Spatial Analysis to try to estimate the scope of class E to residential PDRs in four case study local authorities. This clearly widens the reach of permitted development to a far greater range and number of buildings than the preceding PDRs for change of use to residential. It is hard to think of many buildings in a local high street or town centre which would not be liable to change to residential under the new rights. This calls into question the policies from a Local Plan related to things like town centre regeneration, which would no longer be able to be applied to much change and development. There would also be considerable scope for poor-quality housing to still be delivered through this PDR, with the associated social and economic impacts.

The pattern of future use of commercial space as we come out of the pandemic is also uncertain, making the timing of this policy unfortunate: temporarily vacant commercial space may be converted to residential use before we have a proper understanding of the longer-term demand for such space – and residential space is harder to convert back to commercial use than the change the other way round. At the same time, the government has proposed making it harder for local authorities to try

to remove these PDRs through the use of Article 4 Directions.[9] There is every reason to be concerned.

There is, of course, a need for more housing, but we need the right quality, affordability and type of homes in the right places. In seeking to boost housing supply, the government seemed to go very quickly for the deregulatory (and, for central government, no apparent cost) approach of PDRs, following suggestions from right-learning think-tanks. Yet there were alternatives to promote adaptive re-use of buildings. Such change of use has always happened: in 2006-07, under the requirements of needing full planning permission, 20,150 new dwellings were created across in England through change of use. That this number had declined to 11,540 by 2010-2011 will have had much to do with economic cycles and the global financial crash rather than planning 'barriers' and would surely have rebounded even without the government expanding permitted development in the way it did.

Our research found that before the office-to-residential PDR, from 2009 to 2013, 87% of planning applications for office-to-residential conversion did get planning permission, suggesting that there was hardly a deluge of schemes being blocked by the planning system. Lack of conversion of even vacant commercial buildings can be about issues beyond just planning regulation, such as lack of awareness of possibilities by landowners, absentee owners, developers tending to want to do the new build schemes they are used to, broader local economic conditions, and so on. These can be tackled in alternative approaches to deregulation, such as local authorities proactively setting out policies for where and how they would want to see conversions, and working proactively with landowners and developers to promote conversions (all of which require properly resourced planning departments).

Sadly, we did not take a planning-led approach to promoting adaptive re-use in England. Left to the whim of developers, some good-quality schemes have certainly been delivered through PDRs, but a majority of what I would estimate to be over 75,000 dwellings created through change-of-use PDRs since 2013 are of poor quality. The question about issues related to this now existing housing stock, plus the continuing possibility of yet more problematic dwellings being created under the newly expanded PDRs, mean that there is every reason to seek proper legislation to ensure homes fit for all of society to have a reasonable chance of a good quality life in.

The government seems wedded to PDRs and problematic planning reform which can mean, while not as bad as PDRs, even developments having gone through full planning permission can be far from perfect.[10] Given this, we need a Healthy Homes Act to ensure adequate safeguards for the decent housing we should expect in our society.

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Notes

1 'New freedoms to support high streets and fast track delivery of schools and hospitals across England introduced today'. Press Release. Ministry of Housing, Communities and Local Government, 31 Mar. 2021. www.gov.uk/government/news/new-freedoms-to-support-high-streets-and-fast-track-delivery-of-schools-and-hospitals-across-england-introduced-today

2 *Supporting Housing Delivery and Public Service Infrastructure: Government Response*. Ministry of Housing, Communities and Local Government, Mar. 2021. www.gov.uk/government/consultations/supporting-housing-delivery-and-public-service-infrastructure

3 Live Tables on Housing Supply: Net Additional Dwellings. Ministry of Housing, Communities and Local Government. www.gov.uk/government/statistical-data-sets/live-tables-on-net-supply-of-housing

4 See B Clifford, J Ferm, N Livingstone and P Canelas: *Assessing the Impacts of Extending Permitted Development Rights to Office-to-Residential Change of Use in England*. RICS Research Trust, May 2018. www.rics.org/globalassets/rics-website/media/knowledge/research/research-reports/assessing-the-impacts-of-extending-permitted-development-rights-to-office-to-residential-change-of-use-in-england-rics.pdf; B Clifford, J Ferm, N Livingstone and P Canelas: *Understanding the Impacts of Deregulation in Planning: Turning Offices into Homes?* Palgrave Macmillan, 2019; B Clifford: *Healthy Homes? Thirty Examples of Permitted Development Conversion*. Bartlett School of Planning, University College London, Sept. 2019. www.ucl.ac.uk/bartlett/planning/sites/bartlett/files/tcpa_room_the_breathe_examples_-_clifford_et_al.pdf; and B Clifford, P Canelas, J Ferm, N Livingstone, A Lord and R Dunning: *Research into the Quality Standard of Homes Delivered through Change of Use Permitted Development Rights*. Ministry of Housing, Communities and Local Government, Jul. 2020. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/902220/Research_report_quality_PDR_homes.pdf

5 The recent Leicester appeal is Planning Inspectorate reference APP/W2465/W/20/3259525. The Hounslow appeals from 2015 are Planning Inspectorate references APP/F5540/A/14/2228951 and APP/F5540/A/14/2228868

6 ''Permitted development' homes to meet space standards'. Press Release. Ministry of Housing, Communities and Local Government, 30 Sept. 2020. www.gov.uk/government/news/permitted-development-homes-to-meet-space-standards

7 *Planning for the Future*. White Paper. Ministry of Housing, Communities and Local Government, Aug. 2020. www.gov.uk/government/consultations/planning-for-the-future

8 M Madeddu and B Clifford: 'Housing quality, permitted development and the role of regulation after COVID-19'. *Town Planning Review*, 2021, Vol. 92 (1), 41-48

9 *National Planning Policy Framework and National Model Design Code: Consultation Proposals*. Ministry of Housing, Communities and Local Government, Feb. 2021. www.gov.uk/government/consultations/national-planning-policy-framework-and-national-model-design-code-consultation-proposals/national-planning-policy-framework-and-national-model-design-code-consultation-proposals

10 *A Housing Design Audit for England*. Place Alliance, Jan. 2020. http://placealliance.org.uk/research/national-housing-audit/

three planning paradoxes

Local authority planner **Grant Butterworth** offers a personal view on the contradictions of the government's planning reform programme, as encapsulated in the Planning White Paper and the continuing expansion of permitted development

The Westminster government's Planning White Paper promises to deliver better, faster, and more cost-effective planning in England. Many a project manager has learnt to their cost that competing objectives of improving quality, reducing time taken and delivering outcomes at lower costs essentially conflict with one another – requiring difficult choices to be made. Securing a better project or product will rarely prove cheaper, nor will the project be delivered more quickly.

The White Paper promises much to everyone, with no identified down-side. But the combined effect of the government's planning reforms – and particularly the widespread expansion of permitted development – has been to undermine attempts to secure much-needed minimum standards, in the delivery of decent, health-supporting homes and in the wider place-making agenda. But the government adopts opposing policy positions while presenting them as being coherent and complementary. There are three key paradoxes here.

Paradox 1: Market led yet centrally imposed – no intervention unless from the centre

This government's instinctive mistrust of planning/interventionism and its confidence in market-led solutions runs through its DNA (certainly pre-COVID), and a reduced role for the state has been pursued by successive governments for decades.

Yet, conversely, the government proposes an *increasingly centralised Westminster diktat*. The National Model Design Code, the National Design Guide, a national set of development management policies and a new national Infrastructure Levy will all be penned by central government. National energy and climate policy, with Building Regulations setting the standard requirements, will be needed.

National control of funding for capital projects is led by short-term challenge funds, with ever tighter deadlines by which hard-pressed councils need to respond. Funding outcomes are determined by Ministers, with little sign of empirical evidence-based and transparent rationales.

School provision used to be planned by local councils, aligned with housing growth and regeneration planning; but the education programme is now nationally determined by the Department for Education, with sites for academies being found and acquired, and schools delivered, though a centralised function.

Health planning is on a similar trajectory, with Westminster taking the decision-making reins from trusts, clinical commissioning groups, and (say it quietly) regional health structures. Schools and new hospital buildings will be more modular and centrally specified and procured – little chance of locally distinctive beauty here (quicker yes, cheaper yes, better quality no).

Article 4 Directions which allow locally determined approaches are in the Westminster government's sights. The same Westminster-drafted development management policy will apply to villages in Cornwall, Inner London boroughs, Midlands university cities and northern seaside resorts, even though such diverse housing market impacts surely require locally distinct policy responses. Reducing the scope for Article 4 Directions shows the *total faith the government has in its ability to centralise policy*.

The National Planning Policy Framework (NPPF) says little about employment, yet business characteristics and labour market relationships (manufacturing, distribution, foods, creatives, crafts, service, or retail led) are diverse and often fragile. Councils cannot safeguard employment land (nor sustain and retain existing local employers who may be seeking to expand) in the context of current policy; Use Class E (of which, more below) crushes this potential.

Most local businesses wish to expand locally, close to their workforce, but are all too often unable to find sites. The lack of sites and constrained city boundaries, coupled with an NPPF that prioritises residential development over any other use, already combined to create a perfect storm. This is now compounded by sweeping Class E freedoms which open up such sites to retail and other commercial uses.

Councils (even those with elected mayors) will need to *abide by the national development management manual* – no ifs and no buts. Councillors and constituents alike are already shocked by the lack of 'real' planning authority control, and by the overriding imperative of government policy at planning committees and Local Plan examinations. The Planning White Paper promises a population more engaged with planning; I fear that population is in for a big disappointment.

Localism is definitely dead – this is the most centralising government since the 1980s. At the same time, the market has never had it so good in terms of exemption from control, and planning authorities have never had such little actual influence. But there are areas in which the government beguiles us with promises of more control, influence, and the ability to assert our role – what about the new emphasis on design and beauty?

Paradox 2: Freedom yet popularity in beauty that is centrally defined but locally appropriate?

The government's objective of pursuing beauty is seductive; what's not to like? The local definition of what is beautiful for Bath or Bradford will need to 'fit' with the National Model Design Code – but it is to be locally endorsed, and therefore popular and fit for purpose. Democracy will prevail over specialist niche groups evoking the merits of suspicious stuff such as Brutalism or Modernism. Recent icons of 20th century design that are not protected as heritage assets will become an endangered species.

Innovative and challenging new architecture is already often faced by calls for predictable pastiche 'classical' schemes that may be comforting and popular. But *poorly executed, predictable pastiche classical designs can be architecturally illiterate* (popular and comforting does not necessarily mean tasteful), and can also leave the door open to very poor and non-locationally responsive development. We need a more informed and refined approach to enhancing the complex character of our diverse towns and cities through good architecture which speaks of today. 'Beauty' is a potentially subjective and divisive idea within the diversity of the country's population; should a majority view dictate design approaches to culturally significant architecture such as churches, mosques, and temples?

The recognition of the need for councils to intervene in design quality is, of course, welcome. This policy direction is an interesting part of the paradox in which national volume housebuilders are tasked as the main means of delivery and yet are not trusted to develop good design. Council urban design teams will be happy to step in – but, with limited resources, they will probably need to spend many months (or years?) and tens (or hundreds?) of thousands of pounds on developing and securing endorsement for design codes for the proposed new 'Growth' and 'Renewal' areas. Urban design and policy teams will

need to drill down into viability, development appraisals and quantity surveying work to be able to specify deliverable design codes. I fear the capacity and capability is just not there.

This leads on to one of the biggest paradoxes of all: the pursuit of beauty alongside the Westminster government's ongoing obsession with continual expansion of permitted development rights.

'**Urban design and policy teams will need to drill down into viability, development appraisals and quantity surveying work to be able to specify deliverable design codes. I fear the capacity and capability is just not there**'

Paradox 3: Beautiful, permitted and yet uncontrolled development?

Less control

Getting local communities to endorse local design codes and thereby more willingly accept the need for new development is a major plank of the *Planning for the Future* White Paper's aim to unlock the quicker, better, cheaper paradox.

But taking more planning decisions out of the (accountable) local planning authority's control undermines this objective. Prior approval for house extensions may be fine if you happen to get on with your neighbours, but surely planning assessments should also be about the impact on future occupiers, regardless of current relations? *Amenity, quality of life, privacy, noise and comfort are reasonable expectations of life, which are often undermined by prior approval or permitted development schemes.* The huge expansion of prior approvals cuts right across the design objectives that the government has set out. Most people I meet are very surprised by the lack of 'power' that planning authorities have in decision-taking, and almost all would prefer local authorities to have more, not less control.

Full planning permission will no longer be required to convert shops, offices and other commercial buildings to residential use, nor to demolish commercial properties and rebuild for residential use, or even to build two stories onto existing buildings. This latter 'freedom' is generating some interesting design proposals. At the time of writing, we at Leicester City Council have received nine applications (coded in our application management system under 'SHT' – which stands for 'Stories higher = two', in case you were wondering). Of these, five have been refused, three have been withdrawn,

and one is under consideration. Anyone with a strong constitution in the face of design shortcomings can view the plans of a few SHT Leicester application examples on the council's website.[1]

Large-scale permitted development

The shocking conditions and health and wellbeing impacts of much of the housing that has been produced through extended permitted development rights (PDRs) – with those participating in this market operating with tight margins and using design and specification approaches often resulting in poor-quality schemes – have been well documented by the TCPA and others, as set out strongly elsewhere in this issue.

Thankfully, amendments to the extended PDRs to allow councils to assess more aspects of these applications in determining their acceptability, including the recent requirement for the application of Nationally Described Space Standards, will help to moderate the impact of extended PDRs on housing. Nevertheless, PDRs continue to be expanded and the ever-increasing complexity and changing parameters being imposed demonstrate the ongoing inability for successive Ministers to get these decisions right. Permitted development applications are becoming as complex as full planning applications (but without the full fee, naturally) – the right to permitted development used to be relatively limited in scope, and simple and easy for planners to hold in their heads and advise confidently upon. Those days are long gone.

'**If the government really wants to simplify, speed up and improve the quality of planning, a bonfire of PDRs and prior approvals would be a good start**'

One of our most diligent senior planners at Leicester maintains a matrix of the myriad of different types of PDRs, setting out the varied considerations, validation requirements, constraints, fees, publicity requirements, and commencement and expiry dates. The document now runs to over 20 categories over nine pages, and keeping on top of it is a 'repainting the Forth Bridge' type of job. This is not efficient or effective, nor is it productive planning.

The most recent element of extended PDRs – the new Use Class E and new PDRs to convert Class E uses to residential uses after 1 August 2021 – fundamentally undermines the core functions of the planning system at a time when it is perhaps most needed.

The impact on local employers seeking business sites has been noted above, but planning used to –

and should – aim to support sustainable and inclusive patterns of development in city, town and local centres by directing retail, leisure and other town centre uses to such areas, well served by public transport that is accessible to all, especially those without access to a car. The associated agglomeration effects supported diverse centre-based commerce and trade, and the environmental impacts of car-based activity was minimised. Out-of-town retail was managed. Once the full provisions come into force, Class E will allow retailers to develop shops in out-of-town business parks and in industrial sheds, alongside converting similar premises to residential use. Retaining employment allocations for local businesses will become even harder, and the removal of planning protection for local centres at such a crucial time, post-COVD, and in a context of increasing online purchase and delivery, is a huge gamble with the future of our central areas.

If the government really wants to simplify, speed up and improve the quality of planning, *a bonfire of PDRs and prior approvals would be a good start*.

Conclusion

Our cities and countryside have gone through many periods of intense change and challenge, with planning playing an invaluable role. But the planning system is currently confusing and complex, and rationalisation and simplification is a worthy objective – and would be a significant achievement. However, the mixed messages and conflicting positions of the government to date do not demonstrate clarity of thinking, especially when this last 12 months has taught us that public sector intervention for the public good is no bad thing.

Even assuming that we can manage COVID-19 down to a level at which society can resume with some normality, the huge climate, health and wellbeing challenges require more, not less planning.

The paradoxes set out here can be reconciled; the government would be well advised to slow down and put more resources and consideration into the critical issue of properly reforming the planning system – planners and planning can help to square the circle where the Planning White Paper fails.

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Note

1   The plans can be seen through Leicester City Council's website, at www.leicester.gov.uk/planning-and-building/planning-applications/search-planning-applications/, by searching for case numbers 20202063, 20202259 or 20202019

build up, not out

Sasha Mather explains how technology and urban development company Skyroom is incorporating Health Homes Act principles into its model of sustainable urban development that makes new homes healthy and existing homes healthier

Photos: Skyroom

An airspace development by Skyroom on St James's Road, in Southwark, South London

Construction has often been the catalyst for social and economic recovery. And to little surprise, in autumn 2020, part way through a year spent in hibernation from COVID-19, the Secretary of State for Housing and Local Government announced a five-year affordable housing investment sum of £12 billion, apparently the highest single funding commitment since 2010.[1] However, 'build, build, build' is not synonymous with 'build back better'. A damming report from the Place Alliance issued in 2020[2] determined that 75% of new housing developments in England granted planning permission since 2017 are of 'mediocre' or 'poor' design quality.

Combating this trend, the proposal for a Healthy Homes Act[3] takes a constructive line by establishing 11 principles for designing homes around the health needs of people and place. They establish 'must-haves' to stop repeated urban design crimes and determine the basic criteria which all new homes should meet in order to encourage, rather than impede, good health for their inhabitants.

The approach taken by Skyroom, the first urban development company to be a signatory to the Healthy Homes Act campaign, is particular: to partner with landlords to identify airspace above their existing buildings and install precision-manufactured homes in these under-used spaces. It is a model to provide homes, specifically for key workers, faster, more economically and more sustainably than is possible by traditional construction methods.

It is quite unusual for a developer to have such a focused demographic in mind as its end-user. But Skyroom believes that meeting the needs of this urban demographic is key to realising UN Sustainable Development Goal 11: 'Make cities and human settlements inclusive, safe, resilient and sustainable'.[4] We need to enable key workers to live well so that so they can continue to support our cities and their citizens. They are the invisible infrastructure without which our cities cannot survive.

Why a healthy homes approach is important in urban development

The dilemma faced by key workers living and working in large cities is that accommodation and travel are all too often prohibitively expensive. Even before the COVID-19 pandemic, we were at a tipping point: more than half of London's key workers could not afford to live in the city.[5] And the resulting migration is set to continue, judging by a Royal College of Nursing survey in which 57% of respondents said that they would be forced to leave the city within five years because of their unaffordable accommodation and travel costs.[6] The strain on their financial and social security have implications for recruitment and retention in public services – and, by extension, the resilience of our communities.

Skyroom set out to improve the lives of key workers by delivering affordable, sustainable, beautiful homes near where they work. Then COVID-19 arrived and brought with it long-overdue recognition of the critical role that key workers have always played in keeping the population safe and healthy. It has exposed that the diverging trajectories of continuing house price growth and stagnant key worker pay are untenable when a healthy society depends on so many people on middle and low incomes. *Rise Up*, the white paper Skyroom published in 2018 with University College London, sets out, in the words of Professor Henrietta Moore, 'a blueprint which will contribute to the transformation of our cities into healthy, sustainable, functional urban ecosystems'.[7]

'There is still a willingness to knock down buildings that have perfectly good structure and fabric. The cost of carbon consumed in the act of construction, and stored in a building's materials ('embodied carbon') is little understood, or at least little valued'

While interventions in the built environment are powerful levers to institute change for good, there has also been a lack of focus on the climate emergency among actors in the built environment sector. There is still a willingness to knock down buildings that have perfectly good structure and fabric. The cost of carbon consumed in the act of construction, and stored in a building's materials ('embodied carbon') is little understood, or at least little valued. It has been calculated that 80% of the urban fabric of the cities of 2050 already exists.[8] The statistic leads one to ask: 'What will the remaining 20% be?'. Building from the ground up, especially where something has

been demolished first, is wasteful, expensive, and disruptive. An alternative response to the statistic is: 'How might we meet our needs without consuming the remaining 20%?' In other words, how can we make greatest impact with the least disruption?

Seemingly small interventions in the urban fabric can have a huge impact on the organism of the city. Making good use of existing buildings is not considered often enough in urban development. Skyroom's solution is to build upwards, not outwards. By doing so, it makes 'prime' locations accessible to many more than the market currently permits. These homes are affordable, sustainable, and comfortable; a home that creates the conditions for good health.

How the Healthy Homes Act principles be applied in practice

Skyroom's earliest projects predate the TCPA and Lord Crisp's launch of the Healthy Homes Act proposals, but the principles are reflected in much of this work, and now inform our design approach from the earliest stages. Listed here are some of the ways in which the Healthy Homes Act principles are reflected in Skyroom's projects and principles.

'All new homes must secure radical reductions in carbon emissions in line with the provisions of the Climate Change Act 2008'

By 2030, Skyroom aims to have provided 10,000 homes for London's key workers in the airspace above existing buildings. These homes will collectively save over 15 million tonnes in carbon-dioxide-equivalent emissions over their lifetime, or the same effect as taking all of London's vehicles off the road for a year.[9] The new homes make considerable material and labour-related embodied carbon savings compared with the traditional housebuilding process, by virtue of being precision-manufactured offsite.

One consideration not accounted for in this calculation is the embodied energy conserved in an existing building by extending its useful life. A UCL Engineering study has put the cost of emissions savings, comparing retrofit versus demolition and rebuilding new low-energy homes, at £629 per ton.[10]

While demolition and rebuild has been the default, the prevailing winds are changing: this year's Pritzker prize win by French architects Lacaton & Vassal signals a change in culture whereby the previously unglamorous art of building re-use is championed. Demolition is 'a waste of many things – a waste of energy, a waste of material, and a waste of history,' says Anne Lacaton.[11]

'All new homes should be built within places that prioritise and provide access to sustainable transport and walkable services, including green infrastructure and play space'

New homes in the airspace above existing buildings can be 'plugged in' to existing urban neighbourhoods, bringing schools, surgeries,

Artistic impression of the interior of a Skyroom home

nurseries and grocery shops closer to home. This encourages active, low-carbon, travel (for example by foot or by bike). The Mayor of London's transport strategy sets a target for 80% of all journeys to be made on foot, by cycle or using public transport by 2041.[12] An obvious approach to closing the gap is to enable the people who travel the furthest distances, most frequently, to travel less far, less often.

One Skyroom project on St James's Road in Southwark, South London, creates spacious homes and private outdoor spaces for all, regardless of the size of the home, as well as a communal roof-top garden for new and existing residents. By virtue of being at least two storeys up, the new homes in each development have far-reaching views, and natural light for hours longer than other homes do. According to a 2010 report commissioned by the Department for Environment, Food and Rural Affairs, even the 'passive' use of green space, like enjoying a view over the canopy of a local park, improves mental wellbeing.[13]

'All new homes must demonstrate how they will be resilient to a changing climate over their full life time'

To reduce the operational energy needs of both new and existing homes, Skyroom integrates renewable energy sources such as solar panels (SPVs) into new planted rooftops. This green layer provides effective insulation and acts to cool the building from heat that would otherwise be absorbed

by a hard dark surface. Green roofs also absorb urban noise pollution and purify the air by absorbing carbon dioxide, screening toxic particulates, and producing oxygen.[13]

The airspace development in Southwark, will incorporate green roofs – one for residents, one for non-human inhabitants. Even on a relatively small scale, this green infrastructure can help to reduce the urban heat island effect and reduce stormwater run-off. These considerations are important to push for in the homes that we are building today, but they must become the default for tomorrow.

What kind of places will we create when we design to the Healthy Homes Act principles?

While the environmental case for choosing to precision-manufacture new homes is clear, it is also the more sociable way of building. The intensity of noisy building works to which neighbours are ordinarily exposed is far less, as the new homes are prefabricated off-site and craned into place.

This is not to say that design quality is compromised. That the homes are built in a factory does not condition the aesthetics or material choices we make. Building up above an existing building demands even greater attention throughout the design process, from massing to material finishes. Each project requires its own design language, as with all good architecture.

We know that build quality hugely impacts the health and security of the home's occupants. Households living in older homes are four times as likely as households in newer homes to struggle with fuel poverty.[14] It was a giant step in the name of progress to see the Mayor of London prioritise new homes for London key workers in a March 2021 announcement.[15]

For Skyroom, the priority is not merely accessibility, but proximity: living close to one's workplace is a sure way to alleviate the expense, fatigue and health risks of long commutes. The 15-minute-city model is much talked of, but in a city with a market as competitive as London's, it is hardly imaginable that it will be within reach for key workers on stagnant salaries. The people who move into the new homes on St James's Road will commute up to 15 minutes to Guy's Hospital, a local police station or school, and will quickly benefit from the step up in quality of life envisioned in the 15-minute-city model.

To realise the potential impact of this approach, it is necessary to scale it across the thousands of acres of suitable airspace across the city. Much of London is owned by a few major landlords, of which local authorities are among the largest, owning on average 25% of the land in their borough.[16] Housing associations hold similarly large amounts of real estate, with the largest dozen alone owning 600,000 homes, or an estimated tenth of all homes in London.[17]

This is why, in 2021, Skyroom launched the Key Worker Homes Fund to accelerate the delivery

of sustainable, affordable, beautiful homes in partnership with London housing associations and local authorities. The £100 million resource invites housing providers to identify buildings suitable for airspace development within their portfolio and finances the delivery of between a dozen and 200 homes across one or more sites in London.

Cities around the UK, and further afield, face similar challenges of the affordability of housing for key workers. The airspace development model can be applied to an array of building types – from mid-20th-century estates to Victorian mansion blocks and even non-residential buildings – making it scalable to most townscapes. Importantly, this is an approach to making new homes which preserves the existing built fabric of cities and avoids the devastating carbon emissions that come with its destruction. These are existing buildings which are worth keeping: adding homes in the airspace is an investment in their long life.

Fewer interventions while improving quality

The challenge to address is two-fold: how to make new homes healthy; and how to make existing homes healthier. It is essential that we embrace the need to build more homes without simply bulldozing and rebuilding large tracts of urban land or expanding into the Green Belt. London's not-so-distant past warns us against creating more urban sprawl. The consequences, as Richard Rogers describes in the preface to *Rise Up*, are 'dead city centres, environmentally ruinous travel patterns, and lifeless communities'.[7]

Until now, airspace development has been seen as too complex, too technically challenging, and too difficult to standardise and to scale. This article demonstrates how Skyroom has applied the technique to deliver more homes where they are most needed. To return to the notion of tomorrow's city already being 80% built, Skyroom's provocation is: How might we meet our needs with fewer strategic interventions in the existing city's fabric? By putting the 'who' and the 'where' first, we can improve the quality of life of key workers and have an amplifying effect on the health, security and prosperity of the greater urban community.

● *Sasha Mather is Head of Community at technology and urban development company Skyroom London. The views expressed are personal.*

Notes

1 'Jenrick unveils huge £12 billion boost for affordable homes'. Press Release. Ministry of Housing, Communities and Local Government, 8 Sept. 2020. www.gov.uk/government/news/jenrick-unveils-huge-12-billion-boost-for-affordable-homes

2 *A Housing Design Audit for England*. Place Alliance, Jan. 2020. http://placealliance.org.uk/research/national-housing-audit/

3 Details of the Healthy Homes Act campaign are available from the TCPA website, at www.tcpa.org.uk/healthy-homes-act

4 Sustainable Development Goal 11: 'Make cities and human settlements inclusive, safe, resilient and sustainable' – see https://sdgs.un.org/goals/goal11

5 *Living on the Edge: Housing London's Blue Light Emergency Services*. London Chamber of Commerce and Industry, Jun. 2016. www.londonchamber.co.uk/LCCI/media/media/Reports%20and%20Surveys/Living-on-the-Edge-Housing-London-s-Blue-Light-Emergency-Services-Report.pdf

6 *Living in the Red: The Cost of Living Crisis for London's Nursing Workforce*. Royal College of Nursing, Jan. 2020. www.rcn.org.uk/professional-development/publications/pub-009012

7 A Kay: *Rise Up: The Case for, and Advantages of, Providing Homes for Key Workers in the Airspace above Existing Buildings*. Skyroom. Institute for Global Prosperity/Bartlett School of the Built Environment, University College London, 2018. https://riseup.skyroom.london/

8 See 'Climate change: UKGBC's vision for a sustainable built environment is one that mitigates and adapts to climate change'. Webpage. UK Green Building Council. www.ukgbc.org/climate-change/

9 'Advantages of Skyroom homes'. Chapter 5, in *Rise Up* (see note 7)

10 *Embodied Carbon: Factsheet*. UCL Engineering (updated). www.ucl.ac.uk/engineering-exchange/sites/engineering-exchange/files/fact-sheet-embodied-carbon-social-housing.pdf

11 O Wainwright: ''Sometimes the answer is to do nothing': unflashy French duo take architecture's top prize'. *The Guardian*, 16 Mar. 2012. www.theguardian.com/artanddesign/2021/mar/16/lacaton-vassal-unflashy-french-architectures-pritzker-prize

12 *Mayor's Transport Strategy*. Mayor of London. Greater London Authority, Mar. 2018. www.london.gov.uk/what-we-do/transport/our-vision-transport/mayors-transport-strategy-2018

13 *Benefits of Green Infrastructure*. Forest Research, Oct. 2010. www.forestresearch.gov.uk/documents/2515/urgp_benefits_of_green_infrastructure.pdf

13 'The Skyroom solution'. Chapter 4, in *Rise Up* (see note 7)

14 *Annual Fuel Poverty Statistics Report, 2018 (2106 Data)*. Office for National Statistics, Jun. 2018. www.gov.uk/government/statistics/annual-fuel-poverty-statistics-report-2018

15 'Mayor to prioritise housing for key workers'. Press Release. Mayor of London, 12 Mar. 2021. www.london.gov.uk/press-releases/mayoral/covid-heroes-to-get-homes-they-deserve

16 A Adonis and B Davies (Eds): C*ity Villages: More Homes, Better Communities*. Institute for Public Policy Research, Mar. 2015. www.ippr.org/files/publications/pdf/city-villages_Mar2015.pdf

17 'Who we are'. Webpage. G15 (group of London's largest housing associations). https://g15.london/who-we-are