

## **Viewpoint: Planning, adaptive reuse, housing quality and health in a post-pandemic England**

In a commentary piece published during the Covid-19 pandemic, we looked hopefully to a time when louder voices demanded and respected the role of regulation in ensuring that appalling poor-quality housing development did not go ahead and instead good housing, which adds value to people's lives, was the norm (Madeddu and Clifford, 2021). Alas, that future is not yet with us and in the last couple of years the housing crisis in England seems ever more acute (reflecting trends seen in many contexts internationally). In this viewpoint we reflect on the implications of this enduring crisis on people's lives, particularly their health and wellbeing. We further discuss how planning deregulation, exemplified in England through expanded Permitted Development Rights (PDR), continue to affect the quality of housing, and argue for a more positive role for adaptive reuse of buildings.

### **Housing quality and health**

There are, of course, many aspects to 'the housing crisis' and it would be better to talk of multiple crises experienced differentially by multiple people in multiple places. A crisis around housing quality is one feature. Already before the Covid-19 pandemic there was a wealth of evidence relating to the relationship between our housing and our health; the World Health Organisation (2018), for example, argued that improved housing conditions can save lives, increase quality of life, reduce inequalities and that housing is becoming increasingly important to health due to demographic and climate change. Meanwhile, the Marmot Review on health inequalities in England included housing as a key social determinant of health, noting the increasing evidence on the relationship between poor housing conditions and physical and mental health (Marmot et al, 2020).

Nevertheless, as we noted in our 2021 commentary, the Covid-19 pandemic has certainly thrown fresh light and focus on housing quality and its relationship with health and wellbeing. A plethora of research helps capture the evidence from the pandemic in relation to a variety of housing contexts and health and wellbeing issues, including strong evidence from quantitative analysis of increased odds of catching Covid-19 if living in overcrowded housing (for example Aldridge et al, 2021); evidence of widespread reporting of physical and mental health problems during lockdowns due to the condition of, or lack of space in, people's homes from self-reported surveys (for example National Housing Federation, 2020); and evidence from qualitative research of lived experience and vulnerability to household exposure and sensitivity to Covid-19 (for example Horne et al, 2023). Factors such as overcrowding, ventilation and ergonomic issues linked to housing design were particularly highlighted or exacerbated by the pandemic as people spent more time at home than usual (Hurst, 2023). Such studies led to calls for "an urgent need to better recognise housing as a leading determinant of health in the context of a pandemic and beyond" (Aldridge et al, 2021: no page number).

Beyond this pandemic-specific context, other events and issues also support the necessity for this better recognition. In November 2022, a Coroner ruled at an inquest that the death of two-year old Awaab Ishak was caused by mould in their home in Rochdale (in the north west of England), commenting that it was not just a "Rochdale problem or a social housing problem" (Kearsley, 2022 in Bancroft, 2022: online). Indeed, while an estimated 15% of social rented homes in London fail the Decent Homes Standard (see Hand, 2022 for a definition of the standard), 18% of homes in the Private Rented Sector and 13% of owner-occupied homes would similarly fail to meet the standards (Hurst, 2023). Following the Grenfell Tower fire in 2017, urgent fire safety requirements led to widespread removal of cladding from residential buildings across the UK, but with severe financial strains placed on many affected owner-occupiers, causing mental health problems and trauma revealing the underpinning precarity of housing-based citizenship (Preece and Flint, 2023).

As well as impacting individual health and wellbeing, poor quality housing has wider social impacts. The BRE estimates that the costs to the National Health Service (NHS) of treating people in housing with significant hazards in England is £2billion per annum, with some issues like excess cold most prevalent in owner-occupied and privately rented rather than social housing (Garrett et al, 2023).

Reducing the negative impact of poor-quality housing on health requires both immediate and long-term interventions. Government action on this has been, at best, schizophrenic. The Secretary of State for Levelling-up, Housing and Communities has instructed registered providers of social housing to tackle mould and damp issues in their homes, and new requirements to improve provision have been introduced by the Social Housing Regulation Act 2023 (Hurst, 2023). At the same time, however, the UK government refused to support amendments to the recent Levelling-up and Regeneration Act which would have made the Town and Country Planning Association's 'Healthy Homes Principles' legally binding for all new housing development (TCPA, 2023).

### **Planning, deregulation and adaptive reuse**

This brings us to urban planning and the role and possibilities of planning regulation. Of course problems with housing quality are wider and go beyond planning issues, for example in relation to maintenance and condition of housing. Nevertheless, the stark reality of life in the contemporary UK is that an increasingly thin, austerity-ravaged local state is incapable of utilising even the powers it already has over housing standards to take enforcement action over substandard conditions and require improvement (Spencer et al, 2020). Retrofitting and adapting existing homes can be complex and expensive. And many of the pandemic-related issues concerned the design rather than maintenance of housing, for example space standards or access to outdoor space. For these reasons, it is vitally important to do as much as possible upfront to prevent poorly designed housing from being developed in the first place. This is where good planning should come to the fore.

Unfortunately, planning has been under concerted attack in England since 2010. A neoliberal discourse against regulation has led to a popular rhetoric that, despite arguably weak evidence, government can fix housing markets by planning reform (ignoring broader monetary, tax and public housing policies, the nature of housing demand, and the presentation of housing as an investment asset rather than vital social infrastructure) (Murray and Phibbs, 2023; Ryan-Collins, 2018). Given recent statements by Kier Starmer, Leader of the Opposition, that he will "bulldoze through planning laws" to "reignite the dream of homeownership" (Starmer, 2023 in Colley, 2023: online) – which seems ominously close to the then Prime Minister David Cameron's claim that planners were the "enemies of enterprise" (Cameron, 2011 in Hickey, 2011: online) – it seems depressingly possible that there will be no positive change in the direction of travel of planning reform in coming years.

The ongoing expansion of Permitted Development Rights (PDR) in England is particularly instructive here. The deregulation of planning control over the change of use of offices into housing was introduced in 2013 following a right-wing Think Tank suggesting that the only reason there would be vacant office buildings under a housing crisis was planning regulation; hailed as a success as it was increasing housing supply, PDR were expanded in 2015 to include a range of other commercial and agricultural buildings which could then be converted into residential use under this route.

In our 2021 commentary, we highlighted housing developed under PDR as often particularly problematic and likely paid for in anxiety, poor health and low utility. Pilot research undertaken since then has found strong association between some of the common design problems with PDR housing, such as lack of internal space, and low mental wellbeing. Residents have reported widespread issues with lack of fresh air, windows they cannot see out of and overheating, and have highlighted the importance of access to open space for their mental health (Clifford and Pineo, 2023).

In recent years, there have been further policy developments driven by central government around PDR. In 2020, following the publication of their own independent review into the quality standard of

housing delivered under PDR (Clifford et al, 2020), a requirement was introduced that there would need to be 'adequate natural light' into all 'habitable rooms' of PDR housing. Following a parliamentary debate, which the government looked at risk of losing, a requirement that all PDR housing consented after April 2021 should comply with the 'Nationally Described Space Standards' was also introduced (Pitcher, 2020).

At the same time as these welcome improvements on housing quality standards, however, new PDR rights relating to upward extensions of existing buildings to create new housing were introduced. Within a year, the government had further expanded PDR rights with a new 'Class E to residential' right that dramatically increased the range and size of commercial buildings which could be converted to residential use, meaning that, in theory, about 80% of non-domestic buildings in England can be changed at least in part to housing under this deregulated planning route (Clifford et al, 2021). In summer 2023, the UK government then proposed increasing the size of conversion scheme permissible under PDR and introducing a new hotel-to-residential right, and in autumn 2023 then proposed allowing existing houses to be converted into two flats under PDR.

Such proposals are problematic because, whilst new regulatory requirements around natural light (although note this does not actually require a window you can look out of or even open) and space standards are welcome improved safeguards, there are still a range of issues which simply cannot be considered under PDR regulations. For example, the very principle of development (is it right to convert this particular building, in this particular location from commercial use to residential use?) or other design issues such as window arrangements, access to outdoor space, access to play space for children on larger conversions and so on. There also seems to be no plan for what to do with the tens of thousands of now occupied poorer quality housing without adequate natural light or space standards allowed under PDR over the years before the regulations were improved.

The debate surrounding PDR in England provides a lens on a number of broader issues related to planning. Because PDR has focused on the change of use of existing (primarily commercial) buildings to residential over the last decade, it also speaks to the issue of building conversion, which has been of growing interest internationally (for example Hamida et al, 2022) and has even been the focus of a supportive campaign 'Retro[fit]First' led by the *Architects' Journal* in the UK (Hurst, 2019). Given the embodied carbon in buildings, in many cases adaptive reuse may be better for the environment than demolition and rebuild, and this became a key issue in the recent battle for planning permission to demolish the Marks & Spencer department store on Oxford Street in London (Stewart, 2023). Simply building more and more housing, and failing to properly implement retrofit measures or other policy interventions to ensure more equitable use of housing could have severely negative climate and biodiversity implications albeit alternatives face "an intimidating political economy" (zu Ermgassen et al, 2022: 12).

Precisely because of the expansion of PDR to cover office-to-residential change of use in 2013, there has been ongoing focus on this type of building conversion for a decade in England, but there is now a broader discussion about the possibility of such adaptive reuse related to the pandemic and post-pandemic ways of working and living. The pandemic does seem to have accelerated the existing trend of a shift to online retail and so, given rising vacancy rates, conversion to housing is increasingly discussed as part of the future of the high street (Carmona, 2022; Clifford and Madeddu, 2022; Habitat for Humanity, 2023). Similarly, more hybrid working arrangements seem to reduce the demand for office space – albeit this is a phenomenon which may take a number of years to play out given tenancy lengths and will likely unfold in a spatially differentiated way (for example, in London potentially leading to reduced office demand in places like Canary Wharf but increased demand in places like the City as firms consolidate workspaces and enact a 'flight to quality') – leading again to further calls for conversion to residential use (Chandler-Wilde, 2023).

These are debates occurring internationally, for example with incentives for such conversions in some US cities and calls for more activity in Australian cities (Harrison, 2023; The Fifth Estate, 2023). Yet

international comparison also shows how differently such conversions are governed under different urban planning regimes and the real world consequences of such regulatory and governance culture differences (for example Canelas et al, 2022).

PDR debates illustrate the materiality of regulatory change and that there may be a range of problematics associated with deregulating the urban (Ferm et al, 2021) including economic and social costs and health and wellbeing impacts for people (Marsh et al, 2022). The evidence from PDR, where for many years housing design was left largely at the whim of the developer, adds further evidence to the argument that voluntary regulation rarely works in upholding standards (Clifford, 2022). In 2021 we were, perhaps, slightly too optimistic about how consumer preference might influence housing quality standards; given an acute housing crisis, including in London an availability crisis and in many places in England an affordability crisis, people are unlikely to be able to exercise much agency over their choice of housing. Under such conditions, poor quality housing will end up occupied simply because it exists. This makes ensuring housing is fit for purpose in the first place through high quality design secured through planning and building regulations vital.

At present, there is an ongoing wider debate in the UK about whether a heavily discretionary planning system is exacerbating the housing crisis, for example with the argument that this particular form of planning might reduce supply and so apparently drive up costs, and that increased planning risk may make it more difficult for developers to afford higher design quality (Gallent et al, 2020; Dembski and O'Brien, 2023). It is perhaps useful here to note that a comparison of office-to-residential schemes permitted under the deregulated PDR route with those allowed through the traditional full planning permission route found that the average quality of schemes was much higher under the increased scrutiny of a full planning permission (Clifford et al, 2019).

This is not because discretionary systems are inherently better than zoning or by-right rules-based planning systems – and indeed plenty of poor quality development is allowed under full planning permission in England (Carmona et al, 2020) – but perhaps because of the inadequacy and low level of sophistication of the rules that regulate PDR developments compared to the ability to take a holistic view of a scheme's merit under the traditional case-by-case approach in the UK or stricter regulatory rules used in other countries (Madeddu and Clifford, 2023). This certainly calls into question whether the highly disruptive complete reform of our planning system would be worthwhile. The debate also illustrates the positive role that planning regulation can play in promoting better outcomes which, given the link between housing and health, are vitally important in relation to residential development.

### **Planning and housing beyond the Covid-19 pandemic**

So what has happened since our previous commentary piece in 2021 and where next? Covid-19 is still with us, of course, but the pandemic has now ended. It will have lasting impacts in terms of changed working and shopping habits and consequent altered demands for office and retail space, the resultant implications for our towns and cities and demand for adaptive reuse of buildings. Debate about the latter has gained much further attention over the past couple of years given concerns not just about commercial building vacancy and the housing crisis, but also about environmental sustainability and embodied carbon in existing buildings linked to the accelerating climate crisis.

The PDR debate in England has been at the sharp end of a wider debate about planning reform. Like any form of regulation, planning regulation reflects questions of ideology and value, what should constitute the goals and realms of state action and power. Particular forms of regulation are inherently linked to assumptions about human nature and, of course, must themselves be understood through the political rationalities and temporalities in which they are situated (Clifford and Ferm, 2021). Unfortunately, within this context, the pandemic does not yet seem to have led to lasting change in terms of the governance of housing design quality (in England at least), with the continued expansion of PDR as an apparently key component of the UK government's planning

reform agenda and 'solution' to the housing crisis. Indeed, there has been an arguably greater focus on the external visual appearance of new housing than its internal conditions, adaptability and liveability for residents (as evidenced by additional references to requirements for 'beauty' included in the recent updates to the English *National Planning Policy Framework*). Just like the global financial crisis in 2008-09, there is a risk that the Covid-19 pandemic is a crisis which fails to deliver meaningful positive change given the omnipresent market fundamentalism which characterises governance in the UK under late capitalism's zombie neoliberal hegemony.

If top-down planning deregulation is all that governments can offer to resolve a multifaceted and socially and spatially differentiated housing crisis, it seems likely that that housing crisis will continue to rumble on, with ever more demands for yet more deregulation (Gallent et al, 2018). The result is policies like PDR in England, where the vitally important issue of adaptive reuse of commercial buildings is thinly governed in an approach notable for the lack of proactive roles for the local state and urban planning, with a range of disbenefits becoming evident. This is not to suggest that planning regulation and the state have played, or will always play, progressive roles in the built environment and society more generally, but a positive role for planning is not only possible but increasingly essential at the intersection of multiple crises. Unfortunately our residualised, demoralised public planning system in England is increasingly unable to play this role with a chronic lack of capacity, resources and support reducing it back to a reactive development control system that is not even allowed to try to manage key areas of development under the shadow, parallel planning system that is PDR.

In many respects, planning and housing issues seem to have worsened since our commentary piece in 2021. It will be perfectly possible for the legacy of the Covid-19 pandemic to be nothing more than an acceleration of existing inequalities, as evidenced by poor quality office-to-residential conversions used to warehouse some of the most vulnerable in society. As dispiriting as it may be to have to revisit the nineteenth century public health origins of the planning movement's case for urban planning, we have to hope that a legacy of the pandemic can instead be the further evidence leading to pressure and eventually action to achieve more progressive futures.

For us, that would include greater recognition of the possibilities of good planning regulation. Alternatives to current dogma are possible. As exemplified through commercial-to-residential building conversions, this would involve better resourced local state planners, able to work positively with communities and other stakeholders to proactively plan where and when adaptive reuse might take place. They should be able to outline what 'good' looks like for these type of schemes and then able to require better design to ensure sustainability and avoid negative health and wellbeing impacts on future residents. They should be able to rely on regulatory ability to ensure a level playing field rather than a race to the bottom between developers on quality. They should be able to secure public benefit from these types of development with an eye to overall place quality as opposed to future social and environmental costs. This requires attitudes different from those that have been evident over recent years and longer-term holistic thinking.

This does also require a recognition of the limitations of planning. As important as we think good planning is, the planning system is not the only reason an office or retail building might be vacant, nor the reason many people cannot afford to buy their own home. The obsession that the housing crisis might just be resolved by deregulatory planning reform ignores so many other important issues, including tax and monetary policy and land-ownership issues. Positively facilitating change of use in the built environment and ensuring good quality, well-placed and designed housing, respecting the human right for housing, requires more radical change in our society. We can but hope for more positive futures, and continue to make the case for planning as a potential part of that better future.

## References

- ALDRIDGE, R. W., PINEO, H., FRAGASZY, E., EYRE, M., KOVAR, J., NGUYEN, V., and HAYWARD, A. (2021), 'Household overcrowding and risk of SARS-CoV-2: analysis of the Virus Watch prospective community cohort study in England and Wales', *MedRxiv*, 2021-05.
- BANCROFT, H. (2022), *Inquest finds toddler killed by mould exposure in 'defining moment for housing sector'*, *The Independent*, <https://www.independent.co.uk/news/uk/home-news/awaab-ishak-death-mould-housing-b2225448.html> (accessed 21.12.23).
- CANELAS, P., CLIFFORD, B., FERM, J., and LIVINGSTONE, N. (2022), 'Hard, soft and thin governance spaces in land-use change: comparing office-to-residential conversions in England, Scotland and the Netherlands', *European Planning Studies*, 30, 725-743.
- CARMONA, M. (2022), 'The existential crisis of traditional shopping streets: The sun model and the place attraction paradigm', *Journal of Urban Design*, 27, 1-35.
- CARMONA, M., GIORDANO, V., and ALWAREA, A. (2020), *A housing design audit for England*, [https://discovery.ucl.ac.uk/id/eprint/10106239/1/Place%20Alliance%20-%20A%20Housing%20Design%20Audit%20for%20England\\_2020\\_Final%20small.pdf](https://discovery.ucl.ac.uk/id/eprint/10106239/1/Place%20Alliance%20-%20A%20Housing%20Design%20Audit%20for%20England_2020_Final%20small.pdf) (accessed 21.12.23).
- CHANDLER-WILDE, H. (2023), *What to Do With a 45-Story Skyscraper and No Tenants*, <https://www.bloomberg.com/news/features/2023-08-29/hsbc-8-canary-wharf-tower-will-it-become-flats-how-can-qataris-upcycle-it> (accessed 21.12.23).
- CLIFFORD, B. and MADEDDU, M. (2022), 'Turning Shops into Housing? Planning Deregulation, Design Quality and the Future of the High Street in England', *Built Environment*, 48, 123-140.
- CLIFFORD, B. (2022), 'Planning Deregulation, Material Impacts, and Everyday Practices: The Case of Permitted Development in England', in Y. Rydin, R. Beauregard, M. Cremaschi and L. Lieto (ed.s), *Regulation and Planning: Practices, Institutions, Agency*, London, Routledge, 27-41.
- CLIFFORD, B. and PINEO, H. (2023), *An exploratory study investigating the health and wellbeing impacts of housing created through permitted development in London*, UCL, [https://www.ucl.ac.uk/bartlett/planning/sites/bartlett\\_planning/files/ucl\\_pd\\_housing\\_and\\_health\\_study\\_-\\_may\\_202350.pdf](https://www.ucl.ac.uk/bartlett/planning/sites/bartlett_planning/files/ucl_pd_housing_and_health_study_-_may_202350.pdf) (accessed 21.12.23).
- CLIFFORD, B., CANELAS, P., FERM, J., LIVINGSTONE, N., LORD, A. and DUNNING, R. (2020), *Research into the quality standard of homes delivered through change of use permitted development rights*, MHCLG, available at [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/902220/Research\\_report\\_quality\\_PDR\\_homes.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/902220/Research_report_quality_PDR_homes.pdf) (accessed 21.12.23).
- CLIFFORD, B., DENNETT, A., CHI, B., (2021), *Mapping Class E: Understanding the expansion of permitted development*, TCPA, <https://discovery.ucl.ac.uk/id/eprint/10132188/1/Mapping%20Class%20E%20Report%20-%20UCL%20v3.pdf> (accessed 21.12.23).
- CLIFFORD, B. and FERM, J. (2021), 'Planning, regulation and space standards in England: from 'homes for heroes' to 'slums of the future'', *Town Planning Review*, 92, 537-560.

- CLIFFORD, B., FERM, J., LIVINGSTONE, N. and CANELAS, P. (2019), *Understanding the impacts of deregulation in planning: turning offices into homes?*, London, Palgrave Macmillan.
- COLLEY, T. (2023), *Starmer: 'I will bulldoze through planning laws' to build more homes*, Planning, <https://www.planningresource.co.uk/article/1830098/starmer-i-will-bulldoze-planning-laws-build-homes> (accessed 21.12.23).
- FERM, J., CLIFFORD, B., CANELAS, P. and LIVINGSTONE, N. (2021), 'Emerging problematics of deregulating the urban: The case of permitted development in England', *Urban Studies*, 58, 2040-2058.
- GALLENT, N., DE MAGALHÃES, C. and FREIRE TRIGO, S. (2021), 'Is zoning the solution to the UK housing crisis?', *Planning Practice & Research*, 36, 1-19.
- GALLENT, N., DURRANT, D. and STIRLING, P. (2018), 'Between the unimaginable and the unthinkable: pathways to and from England's housing crisis', *Town Planning Review*, 89, 125-144.
- GARRETT, H., MARGOLES, S., MACKAY, M. and NICOL, S. (2023), The cost of poor housing in England by tenure, BRE, <https://bregroup.com/news-insights/the-cost-of-poor-housing-to-the-nhs/> (accessed 20.12.23).
- HABITAT FOR HUMANITY (2023), *Empty Spaces To Homes Toolkit*, <https://www.habitatforhumanity.org.uk/emptyspacestoolkit/> (accessed 21.12.23).
- HAMIDA, M.B., JYLHÄ, T., REMØY, H. and GRUIS, V. (2022), 'Circular building adaptability and its determinants – A literature review', *International Journal of Building Pathology and Adaptation*, 41, 47-69.
- HAND, R. (2022). *Why the Decent Homes Standard is being renewed*, <https://ww3.rics.org/uk/en/journals/property-journal/decent-homes-standard-review-private-rented-sector.html> (accessed 16.01.24).
- HARRISON, K. (2023), *Adaptive reuse: should we convert empty offices to address housing shortages?*, <https://newsroom.unsw.edu.au/news/art-architecture-design/adaptive-reuse-should-we-convert-empty-offices-address-housing> (accessed 21.12.23).
- HICKEY, D. (2011), *Cameron labels planning officials 'enemies of enterprise'*, Planning, <https://www.planningresource.co.uk/article/1058481/cameron-labels-planning-officials-enemies-enterprise> (accessed 21.12.23).
- HORNE, R., WILLAND, N., DORIGNON, L. and MIDDHA, B. (2023). 'Housing inequalities and resilience: the lived experience of COVID-19', *International Journal of Housing Policy*, 23, 313-337.
- HURST, S. (2023), *Housing Research Note 11: The Cost of Poor Housing in London*, GLA, <https://data.london.gov.uk/housing/research-notes/hrn-11-2023-the-cost-of-poor-housing-in-london/> (accessed 20.12.23).
- HURT, W. (2019), *Introducing RetroFirst: a new AJ campaign championing reuse in the built environment*, Architects' Journal, <https://www.architectsjournal.co.uk/news/introducing-retrofirst-a-new-aj-campaign-championing-reuse-in-the-built-environment> (accessed 21.12.23).
- MADEDDU, M. and CLIFFORD, B. (2023), 'The conversion of buildings to housing use: England's permitted development rights in comparative perspective', *Progress in Planning*, 171, 100730.

MADEDDU, M. and CLIFFORD, B. (2021), 'Housing quality, permitted development and the role of regulation after COVID-19', *Town Planning Review*, 92, 41-48.

MARMOT, M., ALLEN, J., BOYCE, T., GOLDBLATT, P. and MORRISON, J. (2020), *Health Equity in England: The Marmot Review 10 Years On*, Institute of Health Equity, [https://www.health.org.uk/sites/default/files/upload/publications/2020/Health%20Equity%20in%20England\\_The%20Marmot%20Review%2010%20Years%20On\\_full%20report.pdf](https://www.health.org.uk/sites/default/files/upload/publications/2020/Health%20Equity%20in%20England_The%20Marmot%20Review%2010%20Years%20On_full%20report.pdf) (accessed 20.12.23).

MARSH, R., CHANG, M. and WOOD, J. (2022), 'The relationship between housing created through Permitted Development Rights and health: a systematic review', *Cities & Health*, 6, 833-852.

MURRAY, C. and PHIBBS, P. (2023), 'Viewpoint: Evidence-lite zone: the weak evidence behind the economic case against planning regulation', *Town Planning Review*, 94, 597-610.

NATIONAL HOUSING FEDERATION (2020), *Housing issues during lockdown: health, space and overcrowding*, NHF, <https://www.housing.org.uk/globalassets/files/homes-at-the-heart/housing-issues-during-lockdown---health-space-and-overcrowding.pdf> (accessed 20.12.23).

PITCHER, G. (2020). *Minimum space standards for all permitted development homes, government announces*, *Architects' Journal*, <https://www.architectsjournal.co.uk/news/minimum-space-standards-for-all-permitted-development-homes-government-announces> (accessed 21.12.23).

PREECE, J. and FLINT, J. (2023), 'UNHOMING, TRAUMA AND WAITING: The Post-Grenfell Building Safety Crisis in England', forthcoming in *International Journal of Urban and Regional Research*, <https://doi.org/10.1111/1468-2427.13213>

RYAN-COLLINS, J. (2018), *Why can't you afford a home?*, Hoboken NJ, John Wiley & Sons.

SPENCER, R., REEVE-LEWIS, B., RUGG, J. and BARATA, E. (2020), *Safer Renting: Journeys in the shadow private rented sector*, Cambridge House Research, [https://tfl.ams3.cdn.digitaloceanspaces.com/media/documents/Safer\\_Renting\\_Journeys\\_in\\_the\\_shadow\\_Private\\_Rented\\_Sector\\_-\\_September\\_2020.pdf](https://tfl.ams3.cdn.digitaloceanspaces.com/media/documents/Safer_Renting_Journeys_in_the_shadow_Private_Rented_Sector_-_September_2020.pdf) (accessed 20.12.23).

STEWART, D. (2023), *The battle over M&S Oxford Street and construction's carbon footprint*, *Financial Times*, <https://www.ft.com/content/881d861b-0760-4a1c-a014-8e2023b61e58> (accessed 21.12.23).

TCPA (2020), *Campaign for healthy homes*, <https://www.tcpa.org.uk/collection/campaign-for-healthy-homes/> (accessed 21.12.23).

THE FIFTH ESTATE (2023), *On turning our offices to resi: a little flexibility is needed on all fronts*, <https://thefifthestate.com.au/innovation/on-turning-our-offices-to-resi-a-little-flexibility-is-needed-on-all-fronts/> (accessed 21.12.23).

WORLD HEALTH ORGANIZATION (2018), *WHO housing and health guidelines*, WHO, <https://iris.who.int/bitstream/handle/10665/276001/9789241550376-eng.pdf> (accessed 20.12.23).

ZU ERMGASSEN, S.O., DREWNIOK, M.P., BULL, J.W., WALKER, C.M.C, MANCINIO, M., RYAN-COLLINS, J. and SERRENHO, A.C. (2022). 'A home for all within planetary boundaries: Pathways for meeting England's housing needs without transgressing national climate and biodiversity goals', *Ecological Economics*, 201, 107562.