

What if there were a moratorium on new housebuilding? An exploratory study with London-based housing associations

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What if there were a moratorium on new housebuilding? An exploratory study with London-based housing associations

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Abstract

The shortage of social housing is a crucial element of the UK housing crisis. In England, social rented housing provision significantly relies on market homes construction, with detrimental impacts on residents and the environment. Moratoria are often cited in the degrowth literature as policy tools supporting strategies to break free from growth-driven mechanisms and achieve high levels of well-being while reducing environmental pressures. However, the systemic effects of such a policy on housing and its potential drawbacks are at present understudied. This study explores the extent to which a moratorium on new construction in the housing sector would be an effective, desirable, and feasible policy to address the shortage of good quality social housing. We used existing causal loop diagrams (CLDs) to formulate qualitative hypotheses on the effects of a moratorium on the structures underpinning the construction and demolition of social housing estates. We then explored perceived obstacles or opportunities to its uptake in a workshop with four housing associations, the largest providers of social housing in England. Our CLDs suggest that a moratorium could help to address the growth-dependent mechanisms of social housing provision, with systemic benefits for both social tenants and housing associations. However, the workshop revealed that its adoption would depend on whether the maintenance, repair, and retrofit of the existing stock could offset the perceived advantages of new construction (e.g., quality, quantity, adequacy). Through the use of systems thinking tools, our findings support dialogue around alternatives to the growth-dependent paradigm undermining housing provision within planetary boundaries.

Keywords

social housing; housing crisis; England; systems thinking; post-growth planning

1. Introduction

In 1972 an international team of researchers at the Massachusetts Institute of Technology published the seminal report 'The Limits to Growth' (Meadows et al. 1972). Based on early system dynamics models, their study simulated the implications of continued worldwide growth and explored alternative futures. Their report concluded that growth on a finite planet would reach limits, that different models of collective prosperity were possible, and that urgent action was needed to avoid 'overshoot' and 'collapse' (ibid, p. 24). More than fifty years later, economic growth and consumption have continued their rising trajectory in the OECD world, paralleled by an increase in social and economic inequalities (De Schutter 2024), and the crossing of six out of nine planetary boundaries (e.g., climate change, biosphere integrity; Richardson et al., 2023). Synergistically, these trends have been exacerbating the entangled systemic threads gathered under the term 'global polycrisis' (e.g., energy crisis, wars, pandemic; Lawrence, 2024).

In response to these systemic issues, degrowth scholars have been challenging growth assumptions across sectors, proposing ways to reorganise the economy to achieve high levels of well-being with less energy and resources compared to current levels of consumption in rich countries (Hickel et al. 2021). More recently, post-growth planners have proposed agendas and instruments to set boundaries to growth and achieve alternative futures (Savini 2021; Savini et al. 2022; Durrant et al. 2023; Xue 2015).

Among others, moratoria are policy tools commonly cited in the degrowth literature to support an emancipation from a growth-dependent paradigm. Through the suspension of activities such as resource extraction, tourism, infrastructure development, or soil sealing (for housing, roads), moratoria can help to address ecological overshoot, social shortfall, and capital accumulation synergistically (Kallis 2011; Schmelzer and Hofferberth 2023; Videira et al. 2014; Fitzpatrick et al. 2022). In the construction sector specifically, recent studies and public debates have engaged with the idea of a moratorium as a policy with potential, although counterintuitive, cross-sectorial benefits (ACAN, 2023; Malterre-Barthes, 2021, 2024, 2025; Nick, 2024). Despite being promising, the idea of halting construction in England needs to confront the 'intimidating' political economy of housing expansion (zu Ermgassen et al. 2022, p.12).

Investment in real estate assets is central to the UK economy (Christophers 2023); in this context, housing supply shortage is seen as 'a key driver of the UK's weak economic performance' (Vitali 2023, p.7). Furthermore, the lack of responsiveness of supply to demand is claimed to be a central component of 'the housing crisis', a term often used to define a plurality of 'dysfunctional features' of the housing system (e.g., the lack of affordable homes, falling home ownership, homelessness, and space inequalities; Dianati, 2022, p. 3; Gallent et al., 2017). However, housebuilding and the targets set for it have so far failed to counter the sharp and continuous decline in non-market social housing, a crucial vehicle for good quality, affordable accommodation, and a critical

prerequisite for health equity (Edwards 2016; Cromarty and Barton 2024). In parallel, recent studies of the English housing sector have shown how the current continued housing expansion and limited retrofit are at odds with the country's biodiversity and carbon reduction targets (Cabrera Serrenho et al. 2019; Drewniok et al. 2023; zu Ermgassen et al. 2022).

In this context, the purpose of a moratorium on new housebuilding would be that to help address the irreconcilable tensions between the provision of housing as a basic human need, its commodification in a market economy, and its environmental impact (Nelson 2018; Savini and Bossuyt 2022). The effects of such a policy would be especially relevant for the social housing sector—the most vulnerable to shortage, overcrowding, disrepair, and growth-dependent mechanisms to financially sustain its provision (Baker et al. 2022). Despite its potential, studies examining the systemic effects of a housebuilding moratorium in England, including its feasibility and drawbacks, are at present missing.

On these premises, this paper aims to qualitatively explore the extent to which a moratorium on housebuilding in England would be effective, 'desirable, and possible' (Kallis et al. 2018, p.291). Our study focuses on the effects of halting new housing construction on the delivery of social housing specifically. We use existing causal loop diagrams (CLDs) to formulate hypotheses on the leverage of a moratorium on the system underpinning social housing provision, and to guide empirical investigations of its desirability and feasibility with housing associations (HAs), the main providers of social housing in England (including construction, maintenance, and management; Cromarty and Barton, 2024). We then discuss the systemic changes that a moratorium could contribute to, and be supported by, to realise post-growth housing futures.

The paper is structured as follows. The next section provides a concise overview of the interrelated elements of the housing crisis in England, with a focus on social housing provision and the role of HAs. Subsequently, we describe our methodology, including the approach adopted to develop the CLDs, and the design of the exploratory workshops with HAs. Section 4 and 5 introduce our qualitative hypotheses on the effects of a moratorium and the obstacles and opportunities to its uptake as perceived by HAs, respectively. Finally, we discuss what a moratorium could bring about and what multiscale contingent transformations would be needed to implement it. In doing so, we outline the limitations of this study and propose future research pathways.

2. The housing crisis in England

The housing crisis in the UK has been widely defined as one of affordability, resulting from a mismatch between the increase in housing prices relative to earnings (for a review, see Dianati, 2022). This crisis is particularly acute in England and London, due to, e.g., higher housing prices, greater influx of population, the exacerbation of poverty caused by larger budgetary cuts to social welfare, and the relative absence of policies and investment in protecting and providing social rented homes compared to other parts of the UK (Barford and Gray 2022; Dorling 2014; Edwards 2016; Gallent et al. 2017).

Its impacts are systemic; 8.5 million people experienced symptoms of unmet housing needs in England in 2021 (NHF 2021); in 2019, 17% of English households lived in a non-decent home (33% of 'Mixed White and Black African' households; DLUHC, 2020); temporary accommodation was identified as a possible contributory factor in the deaths of 55 children between 2019 and 2023, and was paralleled by an increase of 27% in rough sleeping in 2023, with nearly half of all cases occurring in London and the South East (Booth 2024; DLUHC 2024).

Possible measures to address this crisis are highly debated. A commonly cited approach is the 'supply side solution'. In this framework, supply shortage is perceived as the main driver to, and even synonymous with, the housing crisis (Dianati 2022; Gallent et al. 2017; Barker 2004; Ryan-Collins et al. 2017). This definition translates in a push for a rapid increase in the number of homes to reduce prices—a contentious approach whose limitations have been extensively discussed. In fact, evidence shows that not only has supply outpaced demand across England (and London) since 1996, but also that additional housing stock supply has a marginal effect on house prices (zu Ermgassen et al. 2022; Mulheirn et al. 2019). Those criticisms converge on the acknowledgment that 'if we want to increase the affordability of housing, more effective solutions lie elsewhere' (Mulheirn et al. 2019, p.26).

In this context, data have shown that the observed decline in housebuilding since the 1970s is the result of an 'almost complete cessation' of construction by local authorities (LAs) of housing at the affordable end of the market (Harris 2003, p.29), also called 'council' or 'social' housing. Decades of neoliberal policies endorsing the privatisation and marketisation of social housing provision have seen the social housing sector in England going from 31% to 16% of the total housing stock (Cromarty and Barton 2024; Malpass and Victory 2010). While the Right to Buy scheme allowed council tenants to purchase their homes at a discount, LAs' ability to build and maintain their housing stock was limited by funding cuts and borrowing caps, encouraging the transfer of their underperforming housing estates to not-for-profit housing associations (HAs), with access to private finance and government grants (Cole et al. 2014; Pearce and Vine 2014; Pawson and Fancy 2003). However, subsequent austerity measures disrupted HAs' financial models and urged them to become more self-sufficient; this translated into business-like approaches, cross-subsidising the delivery, maintenance, and upgrade of social homes (Crook and Kemp 2018; Manzi and Morrison 2018; Scanlon 2017). HAs became 'hybrid' organisations, focusing on income-generating activities (building homes for sale) supported by the use of private finance (long-term bank loans, capital market bond financing, institutional investment; Tang et al., 2017), and merging in pursuit of efficiency (Scanlon et al. 2017). In parallel, Section 106 (S106) agreements provided another construction-dependent channel to provide social homes, whereby developers negotiate with councils the percentage of affordable housing a new development provides (Lord et al. 2022).

Compounded by a decreasing quality of the housing stock, the need to meet ambitious government housebuilding targets, and changing regulatory requirements (e.g., the Decent Homes Standards, national net zero targets), the cross-subsidy model has favoured the demolition of social housing estates and their densification with market homes (Morrison 2013; Watt 2021). This process has been further supported by the belief in the mixing of tenures and income as a ‘remedy’ to perceived issues of segregation and poverty concentration in social housing estates (Lees 2008). Furthermore, in response to a greater emphasis of government’s planning policies on the viability of regeneration schemes, the share of affordable homes completed through developers-councils’ negotiations (S106) has rapidly decreased (Brownill et al. 2015). Thus, despite apparent efforts to ensure replacement of affordable homes in regeneration processes (Mayor of London 2018), the implementation of these schemes have most often resulted in a net loss of social housing units, an increase in the share of gentrifiers, and the consequent displacement (emotional, physical) of incumbent residents (Atkinson 2000; Davidson 2008; Watt 2009; Watt 2021).

In response, there is a call for ‘radical’ reforms and collectively-designed alternatives to the growth-dependent system structures that undermine social housing provision (Watt and Minton 2016; Hodgkinson et al. 2013; Bowie 2017).

Our study proposes the hypothesis that a moratorium on new housebuilding could force action on these structures, and contribute to broader transformations to emancipate housing provision from the hegemony of growth. To explore this hypothesis, we build on a wider research project that adopts a participatory system dynamics approach to map, together with stakeholders, the system structures undermining the provision of healthy and sustainable housing for all in England, and identify possible places to intervene in the system (Pagani, Zimmermann, et al. 2024; Pagani, Walker, et al. 2024).

3. Methodology

This study used participatory system dynamics to formulate qualitative hypotheses on the effects of a housebuilding moratorium on the system underpinning social housing provision. The hypotheses were then explored in a workshop with four London-based HAs, along with the desirability and feasibility of a moratorium.

3.1. Participatory system dynamics

System dynamics (SD) modelling supports a holistic understanding of the structure and dynamics of complex systems, and the identification of sources of policy resistance (Sterman 2006; Sterman 2000). Starting from the seminal work ‘Urban Dynamics’ of J. W. Forrester (1969), SD has extensively been used to study complex problems in the housing sector (Eskinasi 2014; Eskinasi et al. 2009; Dianati 2022; Zhou et al. 2022; Macmillan et al. 2016).

To display the feedback structure of the system under study, SD uses causal loop diagrams (CLDs). CLDs support the visualisation of cause-effect interconnections

between variables, making it possible to qualitatively describe and analyse a system complexity, incorporate different kinds of knowledge, generate hypotheses about the system dynamics, and support decision-making processes (Sterman 2000; Sterman 2006; Meadows 2008).

Participatory SD enables stakeholder participation across the modelling process (Sterman 2000), including the development of CLDs. Benefits involve, e.g., the generation of a shared language among participants, meaning-making, commitment, consensus, alignment, and trust (Rouwette 2003; Eker et al. 2018; Zimmermann et al. 2015).

3.2. Dynamic hypotheses and empirical explorations

The present study focused on two CLDs depicting the structures underlying decisions to demolish, construct, and maintain and repair social housing estates, developed based on the outcomes of previous participatory SD activities (Pagani, Zimmermann, et al. 2024; Pagani, Walker, et al. 2024).

In a first stage, the research team used the two CLDs to formulate qualitative hypotheses around the effects of a moratorium on the system structures and dynamics undermining the provision of good quality social housing. In a second stage, we organised a workshop involving the four London-based HAs that contributed to the development of the CLDs—three of the eleven largest HAs in the UK and one medium-sized HA. Participants included nine HA representatives with decision-making power (directors, managers, coordinators) and expertise spanning from regeneration, strategy, lettings and sales, planning, and communities (identified in quotes as REG, STRA, LESA, PLA, COM, respectively).

The workshop comprised several activities aimed at eliciting possible interventions in the system of social housing management and provision. Based on a quote from the seminal systems thinking work of Meadows (1999) the final workshop activity proposed to explore a housebuilding moratorium as a possible leverage point.¹ We used the two CLDs to support discussion at two separate tables with two moderators each. A survey was administered to participants at the end of the workshop to evaluate impact and learnings.

Workshop discussions were recorded at each table and transcribed using Microsoft Office. Transcripts were analysed thematically using deductive and inductive coding (Braun and Clarke 2006; Nowell et al. 2017). We first organised inductively-derived codes into perceived obstacles and opportunities to the implementation of a moratorium. Subsequently, we elicited common themes across the initial codes (e.g., financial model, quality of homes), with the goal to identify and analyse key arguments across tables. Illustrative quotes were extracted from the transcripts and reported in a semi-verbatim format.

4. Systemic effects of a housebuilding moratorium

Figure 1 and **Figure 2** display the CLDs developed from previous participatory activities. The diagrams illustrate perceptions of the system structures underpinning the construction, maintenance and repair (M&R), and demolition of social housing estates. In the following, we describe the CLDs and outline our qualitative hypotheses on the effects of a moratorium on their variables, interrelationships, and feedback loops.

4.1. Construction, maintenance, and repair

Figure 1 outlines the trade-offs between housing construction and M&R to address (or ‘balance’, B1, B2) the shortage of social homes (in terms of quantity, quality, and adequacy). The surplus generated by the construction of social and market homes (via sale, rent) is reinvested in the M&R of the existing stock (B3) and the construction of new homes (R1, R2). As highlighted by participants during the workshop, M&R is also directly supported by external funding (e.g., investors), originally provided for housing construction.² However, to keep the promises made to investors, the actual construction of homes eventually diverts funding from M&R; furthermore, as regeneration projects can last decades, the financial returns from construction (i.e. the surplus to reinvest in M&R) may not be immediate. Altogether, these cause-and-effect chains reveal a dependence on construction and its funding for immediate and ongoing M&R (R3, R4).

The CLD also suggests that poor housing quality resulting from poor M&R has systemic effects, spanning from tenants’ complaints for disrepair, pressure on frontline staff, and a loss of insight, accountability, and evidence-based decision making of HAs, which is itself fundamental to ensure a good quality of the housing stock (R5). In parallel, it can put strain on HA resources, and compromise their ability to perform proactive maintenance (R6). Finally, it can exacerbate the shortage of social housing and overcrowding, with negative effects on tenants’ health and well-being.

By impacting the CLD variables ‘social housing construction’ and ‘construction of market homes’, a moratorium could disrupt the dependence on housebuilding to maintain the housing stock, and divert resources used for new construction towards M&R. The better quality of the stock could reduce housing shortage, its negative impact on tenants and staff, and the associated costs (‘financial pressure on HAs’, ‘cuts to core and non-core services’), and increase M&R funding (R7). Thus, over the long run, a moratorium could lead to greater housing quality and financial stability. However, such a policy may pose short-term financial challenges, as funding for M&R might be needed at the start to trigger and strengthen its balancing effect (B2).

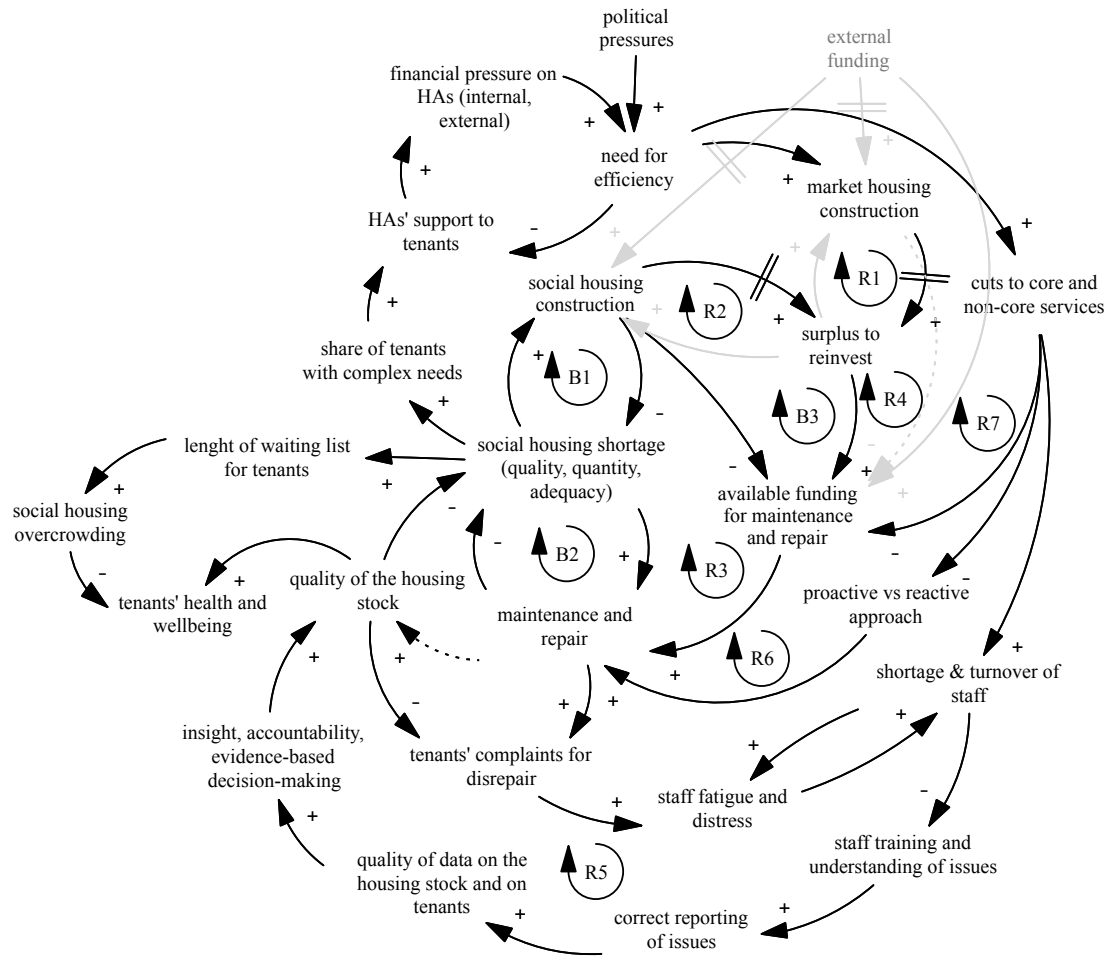


Figure 1. CLD of the dynamics reinforcing the need to build against M&R. A positive (+) polarity indicates that an increase (decrease) in the cause variable will result, *ceteris paribus*, in an increase (decrease) in the effect variable, relative to the value it would otherwise have taken. A negative (-) polarity will lead to the opposite effect. R: reinforcing loop; B: balancing loop. Hash marks: delay. Only key loops are shown. Dotted lines: hypotheses of the researchers. Grey lines: revisions at/after the workshop.

4.2. Demolition and densification

Figure 2 shows perceptions of the cause-and-effect chains underpinning the need to redevelop social housing estates (demolish, rebuild), at the heart of which lie the poor quality of housing, and the societal stigma and discrimination of social housing tenants and of the estates' architecture. In the CLD, the loss of social homes contributes to the residualisation of the sector ('share of tenants with complex needs') and, consequently, to the societal stigma mobilised to justify estate demolition (R1). Stigma is also linked to the disconnection between HAs' management and tenants, which negatively impacts HAs' decision-making and the quality of the housing stock—ultimately contributing to further demolitions (R2).

As the social housing shortage worsens, the sector residualisation and its costs rise (e.g. 'HAs' support to tenants'). The need for funding and efficiency creates a breeding ground for the construction of market homes (e.g., shared ownership housing), and the associated increase in the share of residents with higher socioeconomic status.

Altogether, demolition, residents' displacement, and new market homes directly and indirectly exacerbate the social housing shortage, generating feedback loops that contribute to increased financial pressure, stigma, and the artificial production of social mixing (R3, R4). Beyond stigma and costs, the CLD suggests that demolition of centrally-located social housing estates is motivated by speculative interests in the liberation of prime city land, and the possibility for developers to densify, with market homes, centrally-located areas.

In this setting, a moratorium would discourage the loss of the existing, limited stock via demolition, and halt the construction of market homes ('demolition', 'provision of shared-ownership housing', respectively). In accordance with the causal theory in the CLD, this policy could prevent redevelopment-driven residents' displacement and limit opportunities for speculative investments. Eventually, the benefits of a stable social housing stock on its tenants' health and well-being could allow HAs to engage in better evidence-based decision-making.

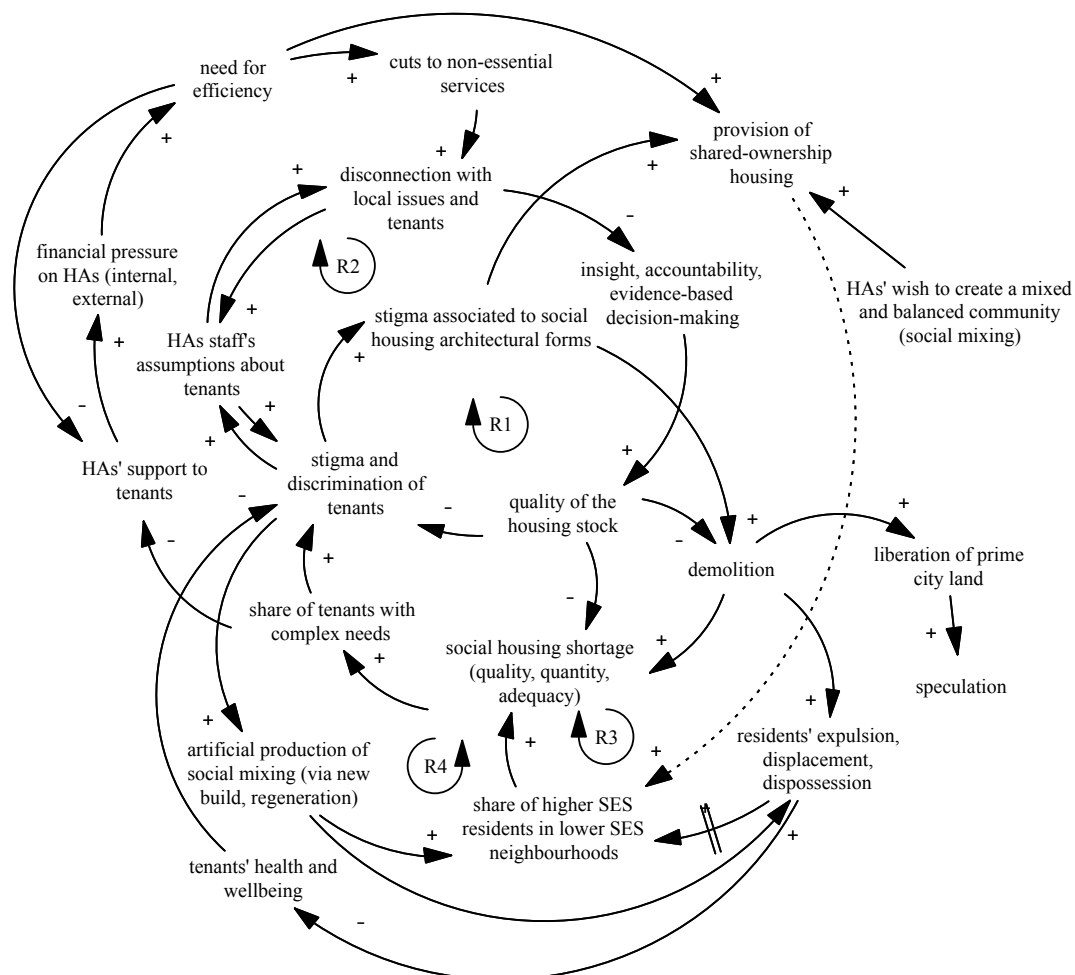


Figure 2 CLD of the dynamics reinforcing the need to demolish social housing estates. Only key loops are shown. Dotted lines: hypotheses of the researchers. SES: socioeconomic status.

5. Desirability and feasibility of a housebuilding moratorium

Our empirical explorations with HAs of the systemic effects of a moratorium both confirmed and challenged the hypotheses resulting from our qualitative system models, while revealing changes in participants' perspectives during the workshop.

When organised into opportunities and obstacles, the results of the discussions between workshop participants outline two opposing pictures: a stagnant system (e.g., rising land prices, overcrowding, lack of tenant residential mobility, end-of-life buildings), and on the other hand an innovative, tenant-centred and better managed one (e.g., focus on management of existing stock, redistribution of floor space, end of Right to Buy, stronger communities). These two scenarios depend on whether or not the maintenance, repair and retrofit of the existing stock would compensate for the lack of (what are perceived as) the gains from construction, in terms of financing and quality and quantity of homes:

We've lost 50,000 units of social rented [homes] to demolition-driven regeneration programmes in London in the last 10–12 years. That would stop, but it probably doesn't make up for the pressure that's going to be generated in the stock as a whole [by projected population growth]. (REG1)

Within these contrasting scenarios, four themes were drawn from our inductive coding of the workshop discussions, namely (i) financial model; (ii) number of (social) homes; (iii) quality of housing; (iv) architecture and planning.

5.1. Financial model

The financial model of social housing provision was recurringly mentioned as a major obstacle to a building moratorium. On the one hand, some participants shared concerns around the potential rise in land and building values a lack of construction would bring about. However, beyond supply side considerations (i.e., less housing equals higher prices), some argued that ramping land and building values would be actively driven by speculative interests:

If the supply is cut off, we'll see a much greater increase in that speculative buying, sitting on, waiting for land values that has blighted so much of the new build in London, where there is absentee landlords in Shanghai or Singapore [...]. You distort a market, and I'm not saying it's a good one, but you risk making it worse. (REG1)

In addition to land and building values, the high costs of existing buildings' maintenance, and/or of the adjustments needed to increase the resilience of the housing stock to climate change were also perceived as a challenge. However, examples were given contradicting this line of argument:

We did an analysis on a block [...] some sort of financial viability on how many people are overcrowded in this block, could we extend into the communal area which was being wasted. And the cost of that compared to actually building a new one, without demolition, was shockingly lower than actually getting a whole block of 9–10 floors [...]. (LESA1)

While some participants appreciated the potential benefits of a moratorium, the cross-subsidisation model was recurrently mentioned as a fundamental obstacle. For HAs, the dependence of M&R on new building construction creates a tension between being ‘[a] sort of new private developer’ versus ‘the best housing manager’:

[A moratorium] forces very different solutions. But it doesn't relieve the financial pressure because that kind of presupposes that HAs have this particular stock which is [all] structurally really sound. [So] in theory it refocuses purpose on management of buildings [but] I don't think the rents from those pay for the ongoing and [...] very proactive maintenance programme [...]. So the business model needs to shift, and that's where those incentives come in. (STRA1)

Finally, in response to an invitation to use the CLDs to reflect on the long-term effects of a moratorium (on tenants' health, financial pressure) as a possible way to emancipate the delivery of homes from the cross-subsidy mechanism, a participant acknowledged the siloed and short-term system in which HAs operate:

[...] the people who are going to benefit are the health service, maybe it's some other part of society. But it's the housing association or the council who have to make the investment at the start. We're not joined up as a society of thinking about the whole life course. [...] Even primary care and hospitals don't speak to each other. (REG1)

5.2. Number of (social) homes

Participants argued that no matter the economic cost, construction is central to addressing a current and future (social) housing shortage. This need is generated by an increasing demand (substantiated by, in their view, population growth projections, or the worrying statistics on social housing overcrowding) and a decreasing supply (the loss of social homes, e.g., through Right to Buy sales).

As for the demand, halting construction was perceived as detrimental for residential mobility and households' life course:

You couldn't have movement of population and movement of people into jobs in different places because there would be no sort of in-between [housing] product in which you could transfer to, so you'd always have to do swaps. (PLA1)

[...] overcrowding will happen in almost all the houses because they haven't got anywhere else to move from where they are now. Because children grow, they become young people, and young people cannot rent out because it's so expensive, so they stay with their parents. (COM1)

Conversely, underoccupancy affects about 10 per cent of social tenants. In this framework, participants expressed concern about forcing residents ‘to give up their home [...]. That requires regulation change [...].’ (LESA1)

As for the supply, contradicting opinions were shared regarding the need to build. On the one hand, housebuilding is driven by societal pressure, i.e., the (historical) duty of HAs to provide homes; on the other hand, *new homes* does not always translate into *new social homes*:

[...] we keep building homes, and not even necessarily [...] social housing [...] just to loosen the system up. It doesn't seem to be working but that's the idea behind. (STRA2)

In this setting, participants criticised the targets set for housebuilding for not addressing the type of tenure needed:

[...] because we don't have housing need assessments, the housing targets that are being debated don't actually talk about what tenures they need. So that's up to the local authorities to decide. [...] It's actually what is the type of housing we need, and where exactly does it need to be? It's not just the numbers. (STRA2)

The number is just *arbitrary*. (COM1, emphasis added)

5.3. Quality of homes

Although construction does not necessarily result in an increase in the number of social homes, there was a general agreement that new builds provide 'the right type of social housing' (STRA2) both from a HAs' and tenants' perspective:

[...] there is still this sense of the Holy Grail of new build being easy to maintain, [...] more energy efficient [...]. If we are going to build new, it's got to be better. (STRA2)

Within this framework, the challenge of a moratorium raised the question of how to deal with a poor-quality existing stock; most participants underlined the need to demolish buildings that are, in their view, either dysfunctional architectural experiments, or 'dangerous' and 'com[ing] to an end of life' (REG1). However, others shed light on a different reality, which triggered discussions around successful examples of alternatives to demolition:

There is probably too much of a belief that demolition is the way to solve the problem. (COM2)

According to some, the high quality of new build is not guaranteed ('some [developers/HAs] are really trying to save money', COM1).

Furthermore, it was suggested that moving away from the need to build could help to focus on the quality of the existing stock and its tenants, e.g.:

Couldn't it provide a bit of clarity from a housing association perspective [...]? Because you would have the tenants' that you've got, [and] your rents would be coming in, and you would be focusing on your existing tenants and properties. (COM3)

Whilst concerns around the financial model and the quantity of homes were raised in response, this vision opened a discussion on possible (architectural, planning) solutions to deal with the existing housing stock.

5.4. Architecture and planning solutions

At different points in the discussion, participants mentioned a range of solutions that could be developed if a moratorium were to be set up. Propositions included a more efficient use of the existing stock (e.g., pocket living, retrofit for more occupants), which could be resident-led (residents '[would] be very creative even without telling us', COM1).

In the same line, several participants discussed the potential of empty properties and space redistribution:

I think it could help us reimagine the use of existing buildings, all of those empty homes, can you own more than one home [...] (COM3)

All the vacant empty homes that are in the country, there's hundreds of thousands of them, for different reasons. (REG1)

You could spread people evenly across all the available space (COM2)

As for empty properties, there was agreement on the need for legislative changes to acquire and avoid losing housing stock, including compulsory purchase orders to 'get everything possible back into operation' (REG1) and a stop of Right to Buy, respectively.

In favour of redistribution, one participant also mentioned the new geographical distribution of households triggered by the COVID-19 pandemic, during which "[team] members moved to Newcastle and Sheffield and Nottingham and Wales" (COM3).

More generally, there was interest in learning from other examples:

And there's examples of smaller housing associations that don't develop, or they're in areas where there isn't any land to develop anymore. [...] and we can look at coastal communities where people are priced out. There's so many different things that we can learn from. (COM3)

Negative experiences were also discussed, like the failure of permitted development rights (PDR)—i.e., 'making offices into housing [...] that in terms of quality that has been so unbelievably unsuccessful' (STRA2).

5.5. Participant feedback: changes in perspective

When invited to share their feedback on the workshop activities with the group, a participant reported on the change in perspective triggered by the quote of Meadows (1999) used by the moderators to introduce the moratorium (see Endnote 1):

That comment [...] by Donella [Meadows], that was quite interesting because before seeing that I thought growth and quick growth and higher growth would be [...] always good; but actually if you take a step back, maybe growth that fast is not always good or it can be detrimental to other things [...]. (LE TSA1)

Other participants identified the benefits of addressing the moratorium question, and the need to include a broader pool of stakeholders in the debate:

I just found the question really interesting. [...] for me it challenged quite a lot of sort of received wisdom that we carry around and [...] I would love to get our development colleagues locked in the room and forced to be at that point. (REG1)

More generally, there was a manifested interest and desire to continue the discussion:

I was so interested in stopping construction. I was just imagining lots of things that can happen if we [...] just stop. And I didn't know a lot about how all the current stocks, the future stocks... This is a lot of imagination that have evolved in [...] thinking. So I'd like to really think more about that [...]. (COM1)

6. Discussion

This study explored the effects and desirability of a moratorium on new housebuilding in England to emancipate the provision of good quality and affordable housing from

dependence on economic growth, and place human needs and planetary boundaries back at the centre (Raworth 2017). After illustrating possible systemic effects of the policy on the social housing sector specifically, we engaged with the arguments supporting or hindering its implementation. In doing so, our investigation opened up one of the ‘black boxes’ of degrowth policy making, i.e., the feasibility of regulations setting limits to growth.

In the following, we discuss our findings in light of other national and international studies. We then outline strengths and weaknesses of our work, and lay out future research pathways.

6.1. A housebuilding moratorium: a synthesis

A moratorium would challenge the narrative around the housing crisis.

Using two CLDs, we outlined the hypothesis that a moratorium on new housebuilding could, although counterintuitively, help to address the dynamics that lead to a decrease in the total number and the share of social housing, reallocating resources to upkeep the existing stock and preventing demolition. If proven feasible (quantitatively, politically), such an intervention would potentially reframe the narrative around the housing crisis away from building to ‘afford’, and towards maintaining to ‘inhabit’.

In fact, our study does not question whether *there is* a housing crisis. However, it aligns with criticisms of the way this crisis is conceptualised, i.e., as a supply issue, whereby housebuilding is the behaviour of a system whose goal is not justice (to meet basic human needs for all) but growth (to adjust housing prices to a growing economy; Gallent et al., 2017). The latter is incentivised by a range of policies supporting investment-led consumption (including overseas buyers, buy-to-let investments, second homes; *ibid*). In this framework, the housing crisis becomes a crisis of distribution between ‘who owns the economy’ and ‘who pays for it’ (Christophers 2020; Dorling 2014). This criticism is not new and has been discussed globally (Aalbers 2017; Wetzstein 2017), prompting approaches challenging mainstream models and assumptions on housing markets and interventions (Wetzstein 2022), embraced by the degrowth and post-growth literature on housing decommodification (Savini 2023).

A moratorium would raise questions around ‘sufficiency’ and ‘finiteness’.

A very practical obstacle to halting construction raised by participants in this study was whether the current housing stock is enough to meet current and future needs.

In this context, workshop participants discussed strategies to maximise the use of the existing stock, including underused and underoccupied homes. According to Mulheirn (2019) there were 1.2 million more homes than households in England in 2019. A recent report based on the Census 2021 data reported 1.5 million unoccupied dwellings in the country (vacant and second homes; Atkinson et al., 2024), i.e., 6.1% of all dwellings. As for underoccupancy, a recent study found that the existing English housing stock is largely sufficient to meet the population’s housing needs (including homeless and

overcrowded households), with only 56% of bedrooms currently used for this purpose, and 17% identified as ‘excess’ (second and further spare bedrooms; Gough et al., 2024). This space inequality contributes directly and indirectly to higher emissions (via residential energy consumption, unnecessary future housebuilding; Gough et al., 2024, p. 57). While these numbers do not in themselves indicate the adequacy of the underused and underoccupied stock, they do reveal imbalances in the system.

The issue of dealing with a limited housing stock was also raised in relation to projected population growth and a possible lack of residential mobility—recurring arguments in favour of housebuilding. As for the former, models have demonstrated the feasibility and effectiveness of reaching ‘net zero housing additions’ by 2035 in England under projected population growth assumptions, with floor area per capita still greater in 2050 than today (Drewniok et al. 2023; zu Ermgassen et al. 2022). As for the latter, low vacancy rates (below ‘natural’) do not necessarily entail a lack of mobility, as they do not reflect the share of dwellings offered on the market at a specific time (which might still be occupied at the time of the offer; see the case of Switzerland; Thalmann, 2012). Nevertheless, a building moratorium would require a redefinition of what a ‘natural’ vacancy rate is, centred around tenants’ needs, rather than investors’ profit.

A moratorium could prompt the implementation of innovative solutions in design, planning, and management.

HAs mentioned a range of existing and/or ‘better’ design, planning, and management strategies to provide more social housing *within* the existing housing stock, most of which are subject of research by e.g. academics, activists, policy-makers.

As for empty homes and low-use homes, a plurality of interventions have been formulated to (i) prompt the release of empty homes (through e.g., the introduction of a vacancy tax, or the exemption from a share of Capital Gains Tax when selling to a council, HA, or community group for social rent); (ii) empower communities and social housing providers (through e.g., a Community Right to Buy, stronger Compulsory Purchase powers, a new government-funded Empty Homes Programme to refurbish empty properties); and (iii) address the regulations and limited data access that have enabled the proliferation of empty homes (through e.g., a national register of residential property ownership and usage, regulations of Airbnb and access to its data, reform/abolition of the ‘second homes’ category; Action on Empty Homes, 2021; Atkinson et al., 2024; Bloomer et al., 2024; Wilson, 2023). Beyond examples in Scotland and Wales, these reforms could build on national precedents; in the late 1970s, social housing delivery in England included the purchase of properties by LAs (14,000 per annum), and an ‘empty homes function’ already exists in most local councils (Diner 2023; Bloomer et al. 2024).

Furthermore, to prevent the loss of social housing to the private sector, the acquisition of stock would need to be paralleled by the abolition of the Right to Buy policy—a measure which received large consensus during the workshop (see e.g., Atkinson et al., 2024; Fraser et al., 2023).

As for space redistribution, workshop participants shared concerns about underoccupancy policies, which have had negative repercussions on social housing residents (see the ‘bedroom tax,’ a tax targeting housing welfare recipients with excess space; Butler and Siddique, 2016). The social housing sector is however far from being the hotspot for space overconsumption (Tunstall 2015), as nearly half of excessive space across tenures is occupied by elderly homeowners without a mortgage, for whom tailored interventions are needed (Gough et al. 2024). National and international examples have proposed alternative ways to achieve a reduction in floor space per capita, with social and environmental benefits (e.g. multi- or intergenerational housing, cluster homes, other forms of cohousing; Bauhaus Earth, 2024; Cohousing UK, 2024; Pagani et al., 2022; Williams, 2002). Alongside opportunities, the monetary and emotional costs/benefits of downsizing would need to be carefully considered, prioritising the needs of the most vulnerable groups (Karlen et al. 2021).

In this landscape, HAs’ role could shift as envisioned during the discussions—i.e., from acting as ‘private developers’ to becoming the ‘best housing managers’, focusing their resources on maintaining their housing stock and prioritising the health and well-being of residents.

A moratorium would propose alternatives to the status quo whereby building new equals building better.

Beyond quantity, this study defined the social housing shortage in terms of quality and adequacy (see **Figure 1**).

Our CLDs suggested that redirecting the focus and fundings from construction of new housing towards M&R of the existing stock could have positive effects across the system (tenants, staff, management) and, potentially, on the means and willingness to maintain the existing stock over demolishing it. However, participants frequently cited buildings coming to an ‘end of life’, dysfunctional architecture models, and the many advantages of new build (e.g., better quality, easier to maintain, more energy efficient, the ‘right type of homes’) as premises for demolishing and building new homes.

Notwithstanding these arguments, the retention and upgrading of existing housing stock have been demonstrated to be socially more acceptable, cheaper, and with a lower environmental impact than demolition (Power 2008; Ferreri 2018; Crawford et al. 2014; Schwartz et al. 2022). However, the adequacy of existing estates (including their proximity to amenities, infrastructure and economic opportunity; Bloomer et al., 2024) must be carefully evaluated to avoid unintended consequences, e.g., perpetuating dynamics of exclusion and (social, environmental) injustice.

In this setting, researchers found that the number of underoccupied bedrooms in England largely follows the population, independently from their geographical location (cities, rural areas); in London alone, their number is large enough to meet the housing needs of all overcrowded and homeless households in the country (Horn 2024). Also, although second and empty homes are more prevalent in coastal areas, ghost enclaves

(with more than 20% of low-use homes) have been identified in several central London LAs and cities like Cambridge (Atkinson et al. 2024).

At a more granular level, estates would need to be assessed against a number of additional housing design and locational features. Research findings on PDR housing (i.e., offices and other commercial buildings converted to residential use), and the recommendations elaborated in face of the negative impact on health and well-being mentioned during the workshop could serve as a compass (Clifford et al. 2023). Furthermore, a ‘re-modelling’ of the role of the architect will become essential to work with existing housing in new and radical ways, centred around ‘unbuilding, reparative works, and resource stewardship’ (Malterre-Barthes, 2024, p.172).

A moratorium would require a redesign of the current ‘business model’ of housing provision.

From our exploratory work, it emerged that a building moratorium could only thrive in conjunction with a redesign of the financial model that has underpinned social housing provision since the 1980s. Gallent et al. (2017, p.12) have defined this task a seemingly ‘unthinkable refunctioning of housing’, whose alternative is an ‘unimaginable level of housebuilding’. Efforts to break the self-perpetuating investment in ‘unproductive’ property (Ryan-Collins 2021) would lie on the premise that decoupling between housing growth and its ecological footprint are not foreseeable (Xue 2015), and by the clear failure of the market system to ‘simply and universally’ meet human needs (Nelson 2018, p.5). This emancipation could start with land ownership; its reform could give back power to the public sector, emulating other countries’ policies for capturing the land value uplift from developments and socialising it (Ryan-Collins 2021). However, from a post-growth perspective, it is crucial to *retain* value rather than *capture* it; depending on the housing system at hand, this is more likely to occur if land and housing property are transferred to legal subjects clearly concerned with affordability and direct use—e.g., permanent social cooperatives, or community land trusts (Savini 2021; Dark Matter Labs 2024; Savini 2024).

As suggested by workshop participants, housing provision could also be based on alternative measures of value creation, including the long-term cross-sectoral benefits of social housing (across health, employment, education). The Centre for Economics and Business Research (2024) estimated that building 90’000 social homes would lead to an indirect economic benefit of 31.4 billion pounds to the Exchequer and wider society in a year; a similar calculation could be done for delivering homes via maintenance and retrofit, rather than construction (which accounts for about a fourth of the gains). These numbers would possibly support the transition towards an economy where financial gains are not needed to demonstrate the importance of societal and environmental gains.

A moratorium would engage stakeholders in thinking and designing systemically.

Notwithstanding differences in HA participants' more (or less) disruptive and systemic perspectives, feedback provided at the end of the workshop put forward the transformative power of participatory system dynamics activities on mental models, i.e., 'beliefs, values, and assumptions [...], underlying the reasons for decision-making' (Pluchinotta et al. 2022, p.281). In this framework, the CLDs and the associated discussions helped question assumptions around causes and consequences of construction, and thus around what is feasible and socially desirable (e.g., economic growth). According to Rouwette (2003, p.251), group model building can work as 'a process of mutual persuasion', whereby participants 'change their evaluations on the basis of information generated by other participants and structured in a model'.

Thus, whilst Malterre-Barthes (2024, p.160) defined the moratorium a 'disruptive legal device to enter in dissidence', participatory SD could be used to support dialogue and consensus-building across levels of decision-making, central to the design and uptake of sufficiency policies in housing (Nick, 2023; Gough et al., 2024). In this setting, as suggested by participants, activities could engage stakeholders beyond HAs (e.g., residents, government, architects, developers) in uncovering tensions between worldviews and related assumptions around system structures (for an example, see Pluchinotta et al., 2022). Such an approach would align with efforts to keep the degrowth project 'one to be worked out through constant reflection and deliberation', by embracing and engaging with its complexity (Videira et al. 2014, p.75).

Finally, a participatory SD approach could well be instrumental to guiding debate on what happens *after* the moratorium, i.e., to engage with when to build again and under which conditions of systemic transformation (supply chain, governance, capital, and value; for a public discussion, see ACAN, 2023).

A moratorium would depend on and could support holistic degrowth transformations

Reflecting on the effects, desirability, and feasibility of a moratorium prompted a questioning of the growth paradigm underpinning social housing provision, while triggering discussions on what it would take to ensure affordable and quality housing for all within planetary boundaries. As it emerges from this study, negative consequences of profit-driven building conversions into poor-quality homes (Pineo et al. 2024), or of the 'bedroom tax' on housing benefit recipients (Gibbons et al., 2020), underscore the importance of situating a moratorium within a broader context of degrowth transformations, aimed at challenging the pervasive growth-oriented worldviews that orchestrate housing markets—from the credit system to the political values of a city or territory.

Recent studies on post-growth housing have highlighted the need for coordinated interventions at different leverage points in the system—including, e.g., its rules (making demolition a last resort), or paradigms (a reconsideration of the categorisation opposing social tenants and homeowners)—to effect transformative and lasting change (Pagani,

Walker, et al. 2024; Nick 2024). According to Schneider (2018), these interventions converge in a housing degrowth narrative, i.e., a sequence of interconnected, multiscale transformations encompassing housing justice and the right to housing, sufficiency, reduction in demand for new builds and urbanisation, settlements that promote ecological recovery and deeper democracy, and alternative housing and monetary relations (e.g., non-capitalist working time, local currencies, or anti-speculation measures).

In this context, a moratorium on new housebuilding would contribute to and be supported by a coordinated system of transformative interventions, aimed at ‘decolonising the imaginary’ from the imperatives of growth (Latouche 2005).

6.2. Limitations and future research

This research is based on premises which must be acknowledged when interpreting the results.

Firstly, our qualitative hypotheses and their empirical exploration were framed within the system boundaries set in the activities that underpinned the design of the CLDs (e.g. literature reviewed, participants involved, geographical focus). Consequently, other factors and related dynamics (including unintended consequences, wider trends) might have been overlooked. Furthermore, our results reflect the mental models of participants from a particular group (HAs), who are just one of the many stakeholders in the social housing sector (along with, e.g., residents, LAs, developers, consultants, medical doctors).

Future research could engage a larger pool of stakeholders in workshops aimed at validating the boundaries set for this study, (dis)confirming the hypotheses built on their ground, and enriching the range of solutions to the challenges raised (e.g., building obsolescence; the quantity and quality of empty or second homes). In parallel, additional research could integrate the learnings from the exploration of the two CLDs to larger and richer CLDs, into assess impact on a broader range of factors (tenants’ engagement in decision-making, social and physical infrastructure for residents; see Pagani et al., 2024b). Finally, research is needed on the impacts of a moratorium beyond the social housing system, including the macroeconomic consequences of halting construction (on employment, homeowners’ financial position; zu Ermgassen et al. 2022) in England and the UK at large, as well as other aspects unaddressed within the scope of this study. These impacts will inevitably need to be evaluated against new indicators beyond GDP, framed within a broader project of a post-capitalist society (Fitzpatrick, Parrique and Cosme, 2022).

All the proposed activities could be supported by system dynamics quantitative modelling, providing critical insights on counterintuitive nonlinear dynamics (see e.g., Dula et al., 2021).

7. Conclusion

This study engaged with a commonly cited tool in degrowth economics and spatial planning, i.e., a moratorium on new housebuilding. It focused on the English social housing system—for its central role in the housing crisis, its dependence on market mechanisms, and its role in housing the most vulnerable population. Our causal loop diagrams suggested that halting housing construction and demolition could benefit social housing quality, tenants' health and well-being, and the management and finances of housing associations. In response, our explorations with housing associations highlighted the need to engage with alternative financial models of housing provision, the quantity, quality, and adequacy of the existing stock, and existing or new architecture and planning tools.

This study enhances understanding of the systemic effects, desirability and feasibility of one planning instrument within the broader framework of transformative measures towards post-growth housing futures. Furthermore, it demonstrates the usefulness of systems thinking tools to support transformative dialogue around alternative models of housing provision.

As housebuilding targets in political agendas continue to rise, this paper could provide the space and evidence needed to discuss alternatives to the growth-driven mechanisms that relentlessly undermine the provision of housing for all within planetary boundaries.

Endnotes

¹ 'And that's why slowing economic growth is a greater leverage point in Forrester's world model than faster technological development or freer market prices. Those are attempts to speed up the rate of adjustment. But the world's physical capital plant, its factories and boilers, the concrete manifestations of its working technologies, can only change so fast, even in the face of new prices or new ideas — and prices and ideas don't change instantly either, not through a whole global culture. There's more leverage in slowing the system down so technologies and prices can keep up with it, than there is in wishing the delays away' (Meadows 1999, p.9).

² Amendments to the original CLD in **Figure 1** include the role of investors ('external funding'), which was not depicted in the original maps and was deemed important during the workshop; the variable 'cuts to non-essential services', which was changed into 'cuts to core and non-core services', to include cuts to core activities like M&R; and 'market housing construction', which was initially called 'number of market solutions'.

Declaration of Competing Interest

The authors declare no competing interest.

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