

Hacking London's demolition decisions: a new collaboration to scrutinize the technical justifications for retrofit, refurbishment and demolition

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Introduction

Demolition of social housing is a highly contentious issue in urban regeneration. Residents and communities are often excluded from decisions about demolition or refurbishment of housing, which are justified in complex economic and technical terms, using language, data and arguments that are hard to access without professional training and expertise.

Although this work focused on London, the slippery definition of obsolescence in the built environment and the difficulties the public face finding data on demolition that are disaggregated by the people and places that have been displaced or have otherwise lost out, are live urban issues in other parts of the UK and Europe, in China and after disasters and conflict. This work, in the new "hacking" tradition of citizens taking apart and remaking ubiquitous technologies, data sets and commonly held beliefs, unpicks what underpins the published literature and represents it a variety of formats, tested with their intended audiences.

The Just Space network and London Tenants' Federation, working with the London Action Research on Regeneration Group (LARRG), identified a need for communities to have better access to the evidence used in decision making about demolition and refurbishment of social housing. It was felt that improved access would support communities in their engagement with regeneration and policy processes. Just Space and London Tenants Federation commissioned a review of the evidence for demolition of refurbishment of social housing.¹ The review was used to support community input into the Greater London Authority's Housing Committee investigation into the demolition of social housing, which was the subject of the committee's meetings in June and July 2014.

[Image 1]

Who was involved and how did it work?

An important part of this research was to use opportunities during the process to reflect on the surprises, challenges and emerging findings from this exchange between community and tenants' groups and engineers: a non-traditional approach for engineering academics whose main research sponsors are from industry or government.

The starting point for this is to explain who was involved. LTF participated in the exchange bringing expertise, experiences and research questions from across the borough-wide organisations of tenants of social housing providers that are coordinated through LTF, an umbrella organisation. Just Space participated in the exchange to share expertise setting up a London-wide network of voluntary and community groups working together to influence planning policy at the regional, borough and neighbourhood levels. The academic team brought together two doctoral students, two post-doctoral researchers and a senior lecturer who

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convened the group, liaised with Just Space and LTF clients and managed the project. We came to the exchange from different backgrounds – anthropology, architecture, civil engineering, energy and sustainability – to share expertise in doing research on buildings and infrastructure systems.

What did we learn and produce?

LTF and Just Space were aiming to address the two questions posed by the GLA's Housing Committee: How are decisions made to either refurbish existing buildings or to demolish and rebuild housing estates? What impacts do these programmes have on communities, households and individuals?

A starting point for this research was the way that evidence was being characterised in the Greater London Assembly's investigation scoping paperⁱⁱ. These extracts from the paper describe the evidence:

"If media coverage is to be believed, a significant proportion of tenants on London's largest, most dilapidated estates continue to be very unhappy with the regeneration programmes underway."

"Other advantages of demolition over refurbishment for the most dilapidated estates include the availability of capital grant for new homes and the reduced cost of ongoing maintenance as well as improved energy efficiency of new build, though conflicting evidence exists on the environmental benefits of each method."

The voices of tenants in this example are just alleged and indirectly reported by 'the media'. The environmental advantages of demolition are asserted but any possibility that the evidence might point to different conclusions is put down to unhelpful disagreements. Thinking about this together helped us to understand which fields of evidence might be important and to engage early with the way that evidence is taken up and represented in this politicised decision-making process.

The review of the technical evidence focused on three themes raised by this investigation. The first of these was the health and well-being of people living with regeneration projects because these data help to understand the experiences of and impacts on social housing tenants of such projects. The second was building performance, understood in terms of energy, water and waste, because this helps to see whether environmental evidence is really conflicting. The final theme dealt with the assumptions underpinning the economic and environmental calculations applied to refurbishment and demolition because these assumptions may be conflicting

The review work was conducted alongside a number of events in the university, as well as in community and local government settings (Image 2).

[Image 2]

Peer-reviewed academic articles and edited industry reports were reviewed in order to synthesize evidence from different fields into a conventional report for client review by LTF and Just Space and academic review by leading writers on the subject (80 pages). An important part of this process was to then present this work again, using feedback from LTF and Just Space, in formats (Image 3) that were easier and faster for all of us to cross-reference and challenge including: balance sheets (4 pages each), that referenced and mapped out the positive, negative, vague and absent evidence on each topic, and a policy briefing note that summed up the state of the evidence (4 pages). To complete this exercise in exchanging and challenging the research, compact factsheets were developed for 'community review' by members of the networks coordinated by LTF and Just Space (2 sided brochures)

During this process, we found that rather than contradictory or 'conflicting evidence', most studies were highly context-specific and patchy in their coverage of different places, groups of people and the impacts that had been assessed. It also became clear that although academic literature is potentially available to communities, developers and local authorities, it is not always free to download from academic journals or fast to review. Lastly, other relevant documents and analyses are not always in the public domain and emerging evidence appears or is categorised as anecdotal.

This review found that evidence was sometimes represented in ways that conflated different research methods with different findings, suggesting unreliable data rather than reliable but incompatible data. There also seemed to be a tendency to publish and republish simple, convenient numbers as universal rules of thumb when the original source research was out of date or based on a very few or specific cases that were hard to disentangle or generalise about. For example, embodied energy is rarely accounted for but is critical in reducing overall emissions. While there is now some consistency in the estimates for the embodied energy of different building materials in the UK supply chain, this cannot be extrapolated directly to the embodied energy of different buildings. Embodied energy is regularly reported as a percentage of the energy used over the lifetime of a building. If this appears to be a low percentage, the significance of embodied energy in decision-making can be dismissed. However, using these percentages to make general claims about the performance of buildings is spurious: the data vary so widely and depend so much on building types, lifetimes and supply chains that they can rarely be compared and should be examined on a case by case basis.

In addition, while there is agreement on the principle of a waste hierarchy, much of what was published about construction waste concerned successes in reusing waste materials rather than the prior consideration: to reuse buildings themselves. In terms of water, measures to manage drinking water inside buildings and surface water around neighbourhoods were not just relevant to new buildings but could be retrofitted. Finally, the review showed that modelling any impacts was highly dependent on assumptions about how long buildings are expected to last; future energy prices; good agreement between the models and real building performance; and the behaviour of people living in buildings.

What will happen next?

The report, policy briefing and fact-sheets provide a resource for members of Just Space and the LTF to draw on in their engagement with decision making about demolition or refurbishment of social housing. The policy briefing note will be distributed and accessible to a range of actors engaged in regeneration decision making, including local and central government.

The project has shown the value of stronger engagement between university researchers and community groups. Just Space and LTF were able to draw on the grounded experience of their members to articulate research needs, as well as provide experience and expertise in marshalling people and evidence to make an effective impact. The relationship has provided opportunities for increasing the impact of publicly funded university-based research in communities and policy-making. The 'client-consultant' nature of the relationship provided helpful structure for agreeing the scope of the project, steering and reviewing the work, and ensuring delivery of useful outputs. The project was useful in identifying how to manage and improve relationships between engineering researchers and community-based organisations in ways that lead to mutually beneficial outcomes.

Captions

Image 1 Clapham Park Estate refurbishment works (credit Kate Crawford)

Image 2 Timeline of events showing the GLA's consultation timetable and the research team's encounters

Image 3 Illustration comparing the formats compiled for different audiences

ⁱ The review was undertaken by the UCL Engineering Exchange (EngEx) to address such needs, by facilitating community engagement with engineering research.

ⁱⁱ Greater London Assembly, "Demolition and Refurbishment of Social Housing Estates in London," 2014, <http://www.london.gov.uk/mayor-assembly/london-assembly/investigations/demolition-and-refurbishment-of-social-housing-estates-in-london>.