The high-rise home: verticality as practice in London

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[A] Abstract

This paper investigates the relationship between verticality and home. It develops the idea 'verticality as practice'. This appreciates verticality not as something that takes place in three dimensional landscapes but that is the outcome of everyday practical activity. Through a modernist high-rise estate, the Aylesbury Estate in London, the paper identifies and examines a range of vertical practices and illustrates how they are intertwined with home. Vertical practices, such as those associated with the view, helped to make a unique and special home that became intensely meaningful to residents. However, they also unmade dimensions of home when they interacted with the estate's marginality.

[A] Introduction

The verticality of the modernist residential high-rise was always important to the architects of the International Style, such as Le Corbusier and Walter Gropius (Corbusier, 1935; Wolfe, 1982). They argued that new vertical technologies, like reinforced concrete and lifts,

symbolized the modern age. High-rise architecture also provided the urban poor with open green space, in between the buildings, and an unobstructed view of the city. This vertical environment was, therefore, an improvement on images of life in dark, confined and overcrowded neighbourhoods of tenement housing (Glendinning and Muthesius, 1994). The vertical encapsulated how modernity could project society into a more socially progressive age. Although this focus on technology and society meant that less attention was paid to home, this does not mean that the architects were against the making of home in their vertical buildings in preference for a more objective form of living. Feelings of home and belonging would rather be the outcome of creating functional and technological living environments.

Although the high-rise has long fascinated scholars, verticality and home have tended to be on the margins of academic literature on the high-rise. Most of the housing literature on the high-rise, which has dominated writing on the environment, has documented its decline examining resident isolation (Amick and Kviz, 1975), and anti-social behaviour and crime (Rainwater, 1971; Power, 1997). Turning its attention to the reasons for high-rise failure began a long debate that has absorbed representations of the high-rise (see Hillier, 1973; Spicker, 1987) and delayed alternative understandings of the environment. Different accounts have only arisen over the last ten years, with Jacobs et al. (2006) paying greater attention to the high-rise's materiality and others exploring high-rise living in London (Baxter and Lees, 2008) and Hong Kong and Singapore (Yuen and Yeh, 2011). Moving beyond the focus on the high-rise as *housing*, a small number of studies are beginning to explore the high-rise as home (e.g. De Vos, 2010; Jacobs and Cairns, 2008; Ghosh, 2014). This understands the high-rise as a domestic environment that is intensely meaningful to residents, and important in identity and belonging (Blunt and Dowling, 2006). Contributing to this emerging work, this paper aims to explore the relationship between verticality and the high-rise home.

To help explore this relationship, the paper draws on emerging scholarship on vertical urbanism. Critiquing early literature on the 'politics of verticality' (Weizman, 2007; Graham and Hewitt, 2012), Harris (2015) argues that an understanding of verticality needs to be developed that attends to 'the experiences, practices and textures of vertical life' (ibid, p. 608). These 'inhabited landscapes of vertical urbanism' need to be explored to reveal the multiplicity of everyday vertical worlds (ibid, p. 609). This paper investigates what this might mean through a domestic high-rise landscape, the Aylesbury Estate in South London. A large modernist high-rise estate with a number of vertical levels, the estate helps to provide an

understanding of multiple everyday vertical worlds. It contributes to this emerging vertical urbanism literature by putting forward the idea of 'verticality as practice'. This understands everyday vertical worlds not as something that takes place *in* a three dimensional landscape, but that is the outcome of practical, human and non-human, activity. In other words, verticality is not pre-given before action takes place, but is co-constructed in everyday life. Documenting and exploring a range of vertical practices at the Aylesbury Estate, the paper illustrates how these are intertwined with home. Vertical practices helped to make a unique home at the Aylesbury Estate that differs from more horizontal forms of dwelling. However, they also unmade dimensions of home due to wider processes of urban marginality (Baxter and Brickell, 2014).

The first part of the paper examines literature on the high-rise and then outlines the current debate on vertical urbanism. The idea of verticality as practice is more fully discussed in this section. The second half of the paper explores some of the multiple vertical practices associated with the estate, specifically those related to its original design and its everyday inhabitation. The paper illustrates how vertical practices are intertwined with home at the Aylesbury Estate.

[A] The high-rise as home

Home has always been on the margins of literature on the residential high-rise, which is perhaps surprising given that they were built for people to live in. Although the modernist architects of the International Style, such as Le Corbusier and Walter Gropius, intended to design modern and comfortable living environments, the words 'home' and 'domestic' were rarely used. Reflecting the privileging of ideas with masculine connotations in architecture at the time, the emphasis tended to be on more objective and 'higher' ideals, such as geometry, rationality and order (see Pinder, 2005). For example, important to high-rises in Europe, the mathematically informed concept of Zeilenbau increased the amount of green space available to residents and natural light to flats by raising density through building high (Glendinning and Muthesius, 1994). This also enabled residents to experience a view. These ideas were appealing to policy makers and a new generation of architects, who were mostly male. One of the few times that Le Corbusier engaged with domesticity was through his discussion of syndicalism, an imagined social system with a clear distinction between work and home life

(see Fishman, 1977). Industry would be ordered and hierarchical, while the domestic would be liberated, community orientated and without chores.

Most academic research on the high-rise has origins in studies of housing. Glendinning and Muthesius' (1994) expansive book *Tower Block* documents the development of modernist UK high-rises in the 1960s-70s. Reflecting the backlash that later emerged, much of the housing literature has since explored high-rise failure. Particularly in the 1970s, a number of quantitative studies documented statistical correlations between the high-rise and resident isolation (see Gifford, 2007). Some authors explained this by the building's higher density, which causes residents to withdraw into flats (Amick and Kviz, 1975), or an absence of communal spaces (Yancey, 1971). Writing more recently, Kearns et al. (2012) found a similar relationship for high-rises in Glasgow. A smaller number of qualitative studies accessed a greater richness and detail about everyday life, but these also tended to portray the high-rise as a failure because they focused on the most marginalized high-rise estates. For example, Rainwater's (1971) seminal text *Behind Ghetto Walls* provided a bleak portrait of family life at Pruitt Igoe in St Louis, one of the most marginalized housing projects by class and race in the US at the time. Power (1997) similarly explored 'estates on the edge' in Europe, such as Broadwater Farm in London and Les Minguettes in Lyon.

Pruitt-Igoe became implicated in a long and bitter debate about the reasons for high-rise failure. Introducing the idea 'defensible space', Newman (1972) argued that the high-rise's shared spaces, such as stairwells, lifts and internal corridors, increased the probability of crime and anti-social behaviour. He argued that such spaces are indefensible because they lack resident surveillance and feelings of territorial ownership. Adopting these ideas in the UK, Coleman's (1985) *Utopia on Trial* influenced government policy on estate mitigation and resulted in the eradication of certain 'disadvantaged designs' like vertical walkways. However, a number of architectural writers critiqued this approach arguing that high-rise failure is the result of social problems, such as class and racial oppression (Spicker, 1987; Hillier, 1973), rather than design. This divide has since been developed into more complex frameworks, which point to interactions between design and society (Power, 1997; Baxter and Lees, 2008). Although obviously important, this debate has drawn attention from other possible ways of studying the environment and resulted in an over focus on the shared spaces.

Recent explorations of the high-rise in human geography have been more directed by social and cultural theory. Drawing on the 'critical geographies of architecture' (Lees, 2001), Baxter and Lees (2008) examine the lived experience of residents and move towards a more diverse understanding of the environment by focusing on both marginalized and ordinary high-rises in London. In Singapore, Appold and Yeang (2007) similarly explore high-rise living focusing on family relations and the extent of isolation. Moving beyond the human, Jacobs (2006) uses a relational material approach to explore the modernist high-rise estate Red Road in Glasgow (see also Jacobs et al., 2007; Jacobs et al., 2010; Jacobs, 2006). Drawing attention to non-human artefacts, such as windows and the steel infrastructure, Jacobs et al. (2007) argue that 'building events' in high-rises emerge through alliances between social and technological actors. However, other geographers counter that, like the accounts that focus on the human, this risks providing a partial account of the high-rise. Exploring Totteridge House in Wandsworth, London, Lees and Baxter (2011) argue that a fuller reading must involve a conceptual balance between the material, such as technology, and the immaterial, for example emotion and perception. This research has opened up new appreciations of the high-rise, but still focuses on the high-rise as housing.

Although dwarfed by the high-rise research in housing that omits the domestic, a small amount of work has explored aspects of the high-rise home. Early investigations of the high-rise paid some attention to the materiality of flat interiors, including Jephcott's (1971) discussion of modern amenities in Glasgow and Rainwater's (1971) observations of flat contents at Pruitt-Igoe. Reflecting growing interest in merging the housing and home literatures (see Jacobs and Smith, 2008), a few studies influenced by scholarship on home also explore the high-rise's materiality. Informed by the analysis of material culture, De Vos (2010) examines the relationship between the modernist architectural ideals of the Kiel Estate, Belgium, and actual interior furnishings, while Jacobs (2008) explores the politics of representation of interior design in Singaporean high-rises. Moving beyond the domestic interior, Fernández Arrigoitia (2014) investigates how the materiality of the shared spaces were implicated in the demolition of high-rise homes on an estate called Los Gladiolos in Puerto Rico. Other research focuses on humans in high-rises. Blunt (2008) investigates the type of residence that emerged at a high-rise called Christadora House in New York City, which was part of the settlement movement, and Ghosh (2014) illustrates how Bangladeshi immigrants transform Toronto's high-rise spaces to negotiate exploitative housing practices and make home.

This body of work matters because it foregrounds the high-rise as a place of meaning and significance that is important in identity, belonging and attachment (Blunt and Dowling, 2006). Potentially opening up a more intimate, rich and imaginative understanding of the high-rise, the paper, therefore, studies the high-rise as home. It connects to Blunt and Dowling's (2006) 'critical geographies of home', especially their arguments that home is both material and imaginative, and occurs at multiple scales, including flat interiors, the high-rise buildings and estate. It also draws on a theory in literature on home called home *un*making, which argues that home is not just made but made and unmade in everyday life (Baxter and Brickell, 2014). Home is made through the addition of material and imaginative elements to domestic space, such as objects, relationships and feelings, but also unmade when such dimensions are dissolved.

[A] The verticality of the high-rise home

Some research has examined aspects of the high-rise's verticality. Fernández Arrigoitia (2014) explores how the representation of stairs and lifts was an important battleground that was contested by those for and against the demolition of Los Gladiolos. There is also a small amount of work on the view. Griffin (2003) observes the alteration of high-rise design on Australia's eastern seaboard to create a 'wide screen' experience of the view, in this case the Pacific. Informed by the representation of landscape, he argues that this reflects the changing cultural idea that nature can be tamed and is not harmful. By comparison, Jacobs (2010) uses actor network theory to understand the view at Red Road as a performative event made possible by actors, such as architectural ideals, policy regulations and acts of cleaning, held in networks. However, this work does not pay sustained attention to verticality and its relationship to the high-rise home.

To better understand the high-rise's verticality the paper draws on and contributes to emerging literature on vertical urbanism. Originating in Weizman's (2007) book *Hollow Land*, this argues that a horizontal paradigm pervading geopolitics and urban studies only provides a partial understanding of urban territory since power is increasingly deployed through vertical dimensions and processes. Weizman, therefore, proposes a volumetric conception of the city, which attends to power in three-dimensional (3D) space. Examples of this 'politics of verticality' include the modern vertical technologies, like drones and

satellites, that are increasingly used by imperial military states to dominate urban areas (Graham and Hewitt, 2012). However, this conception of vertical urbanism has been increasingly critiqued. Harker (2014) argues that the focus on power through volume 'hollows out' lived experience and 'landscapes of more intensive relations' (ibid: 322). Moving beyond Weizman's (2007) vertical understanding, he seeks to reinstate 'ordinary topologies': the undervalued practices of everyday life that involve qualitative dimensions such as relationships and feelings.

This is an important critique because it highlights the omission of everyday life in early vertical literature. However, Harris (2015) has responded that vertical urbanism is not intrinsically linked with 'hollow lands' since the vertical can also be something ordinary and intimate. Proposing the idea of 3D ethnographies, he therefore argues that there could, and should, be more research on the 'inhabited landscapes of vertical urbanism' (ibid: 609), which are increasingly prominent in cities across the globe. Such research could broadly attend to the multiple everyday vertical worlds, including both the production and consumption of 3D urban spaces. He argues that researchers could explore the experiences, embodiment, meanings, feelings and memories that take place in and about different vertical forms. Such studies could further examine the relationships between these processes and time, the human and non-human, and the complex relationships between the above and below to provide 'a more diverse array of vertical urbanism*s*' (Harris, 2015: 602).

This paper investigates what the inhabited landscapes of vertical urbanism might mean through the domestic urban landscape of the Aylesbury Estate. It contributes to this new lineage of vertical thinking in two ways. First, it develops the idea 'verticality as practice', which is informed by the practice turn (Schatzki et al., 2000; Simonsen, 2007). This does not first imagine a vertical landscape that humans, and potentially non-humans, find themselves in and respond to. Instead, it foregrounds the human and non-human practices of everyday life and understands verticality as the product of this activity. In other words, verticality is not pre-given in this approach, but is the outcome. This is a more immersive conception of vertical urbanism since it emphasises that the vertical is activated and engrained through everyday life. Second, it engages vertical urbanism with ideas of home. This is important given the intensification of vertical homes across the globe, which is the result of the growth of cities, the housing shortage, international property speculation, global cities competing on the world stage and advancements in building technology. Home can also potentially develop

existing arguments about verticality, for example the violence inflicted on some urban spaces through the vertical is so harrowing because such spaces are homes.

[A] Researching the Aylesbury Estate

The Aylesbury Estate is a large modernist high-rise estate adjacent to Burgess Park in the district of Walworth, London Borough of Southwark. The first residents moved in during 1969 and its 2,700 dwellings housed up to 10,000 residents making it the largest social housing estate in Europe. The modern amenities, large flats to Parker Morris standards, the minimum space requirements for UK homes at the time (which means they are big compared to modern apartments), and stable community meant that the estate was initially well received. However, its material and social fabric declined in the 1980s-90s. Following a long and controversial process, the local authority, Southwark, decided to demolish and regenerate the estate in 2005 (see Lees, 2014). At the time of writing, most of the blocks still remain, although half the residents have been moved out. This paper is part of a research project, 2012-15, which sought to provide a biography of the Aylesbury Estate as home. Collaboration with the Geffrye Museum of the Home meant that fieldwork data was archived and an exhibition took place in 2016. The estate was chosen because, despite its historical significance in the context of UK social housing, its history had not been fully explored. It can also help with the examination of vertical practices and home more generally. Informed by the brutalist estate architecture of Le Corbusier and the Smithsons, similar designs can be found throughout the globe especially in Europe. The different vertical spaces of the estate, such as walkways, high flat windows and underground car parks, are also present in a myriad of other vertical structures.

To investigate the relationship between the estate's verticality and home, the research used oral history interviews with residents and home tours or autophotography, in-depth interviews with people who had worked or were working on the estate and photography. Following the benefits of mixed methods (Greene et al., 1989; Rocco, 2003), this enabled triangulation and provided different types of knowledge about domestic verticality. The in-depth interviews with residents helped to reveal the inhabited landscapes of domestic vertical urbanism. Oral history interviews, which also situated verticality in a timeline, were undertaken with 25 residents. Accessing information about the estate's vertical dimensions was comparatively straightforward because these tended to be more significant to residents

than ordinary domestic practices in low-rise buildings. Residents were less aware of their connection to home, and this was explored in interviews and later analysed. All the interviews were transcribed and coded in a qualitative software programme.

The oral history interviewees were given the option of participating in a home tour or autophotography (see Ortega-Alcázar and Dyck, 2012; Thomas, 2009). About half volunteered with most opting for the home tour, which involved walking around flats with participants and learning more about their homes. As well as adding depth about their domestic lives, the home tours helped to understand the vertical practices narrated in the oral history interviews. For example, some participants demonstrated how they stand and look at the view. They also contributed new knowledge about different spaces of the home. For example, being in bedrooms sometimes brought vertical domestic practices associated with these rooms to their awareness. Similarly, a main benefit of the autophotography was that it could reveal vertical experiences and encounters in the shared spaces around the estate. To provide a balanced appreciation of the estate, oral history or semi-structured in-depth interviews, depending on the participant, were undertaken with eight people who had worked or were working on the estate, including some of the original estate architects. Some of these led to knowledge about verticality and home, especially the architects and those involved in the regeneration.

Responding to the increasing attention to visual methods in human geography (Rose, 2012; Garrett, 2010) and the impact of collaboration with the Geffrye Museum, I took photographs of the high-rise home's verticality. Photographs are, of course, widely used in museum archives and exhibitions to provide users with a visual sense of landscape and access to alternative media. They were another way of documenting the estate's domestic verticality. There is a politics to visual representation (Rose, 2012), which I was wary of during fieldwork and before dissemination. For example, reflecting on photographs in his book on dairy farmers, Harper (2002) realized that their composition supported arguments made in the text. This was ethically problematic since some of the farmers he photographed did not share these views. However, as long as researchers reflect on their use, this should not prevent more ambitious attempts to produce photography that is technically and conceptually more aware. I did not want to take photographs that just complemented the text, as they tend to be in academic publications. I wanted them to be more important, engaging, emotionally resonant and with the capacity to co-produce meanings and dialogue with the viewer. As a

result, the photographs in this paper should communicate something both tacit and representational about the verticality of the high-rise home of their own accord. This differs from the photographs in the autophotography, which were used (by me) to elicit information from participants.

[A] Vertical practices of design

Harris (2015) argues that the inhabited landscapes of vertical urbanism includes the architectural production of its design. This means that it is also important to explore the architectural practices involved in making vertical homes. Attention to this relates to emerging social scientific work on the architectural profession (Yaneva, 2009; Rose et al., 2014), as opposed to building inhabitation. However, there is more scope to examine the designing of domestic buildings, as opposed to commercial and civic projects, and adopt this approach in literature on home. The Aylesbury Estate's vertical design was the outcome of the post-war housing shortage, which resulted in ambitious housing targets in national and local government (see Glendinning and Muthesius, 1994), and the influence of modernist architecture. The high-rise visions of architects like Le Corbusier, and Alice and Peter Smithson were seen as the 'leitmotif of post war housing construction' (McCutcheon, in Dunleavy, 1981: 59). Meanwhile the development of industrialized building systems meant that building long and high was cost effective. This wider context materialized in the original brief for the estate, which was prepared by the planning division of Southwark's Architecture and Planning Department (APD). The high density of 200 persons per acre it stipulated, along with industrial building techniques and a restricted budget encouraged the building of high-rises on site. Other specifications, with important ramifications later on, were that cars had to be separated from pedestrians to maximise speed and safety, and all households had to have access to garages. From the perspective of planning, the estate's verticality was framed by rhetoric of rationality and efficiency, rather than home.

In this instance, the practice of verticality involves the actions, such as drawings, encounters and resultant experiences and effects involved in designing a vertical estate. Passed onto an architectural team in Southwark's APD, seven to eight architects were responsible for turning the brief into a successful design. There was recognition that the context in which they were working was not ideal. Designed between September and December 1965, the architects were given a short timeframe for an estate of this size. Just as McNeill (2007) emphasizes that

architects face constraints in design, one of the architects interviewed also stated that 'The brief gave you very little room for manoeuvre away from a scheme of this sort … I'm not sort of shedding personal responsibility but the brief was very circumscribing'. Nevertheless, the architects were well versed in large-scale vertical modernist housing. Many of them had recently graduated from the Architectural Association School of Architecture, a modernist stronghold with teachers such as Alison and Peter Smithson. Following different proposals, a design was selected that involved a mixture of high and lower-rise blocks constructed with the Jespersen 12M building system, which involves the lowering of large prefabricated concrete panels into place with cranes. The topography of the estate, therefore, varies in height, ranging from four storey blocks to fourteen storey high-rises. Walkways were also designed at levels one and two to separate pedestrians from cars and improve circulation (see figure 1). Car parks were positioned underneath high-rises and a large number of garages located at ground level on lower-rise blocks to meet the requirements of the brief.
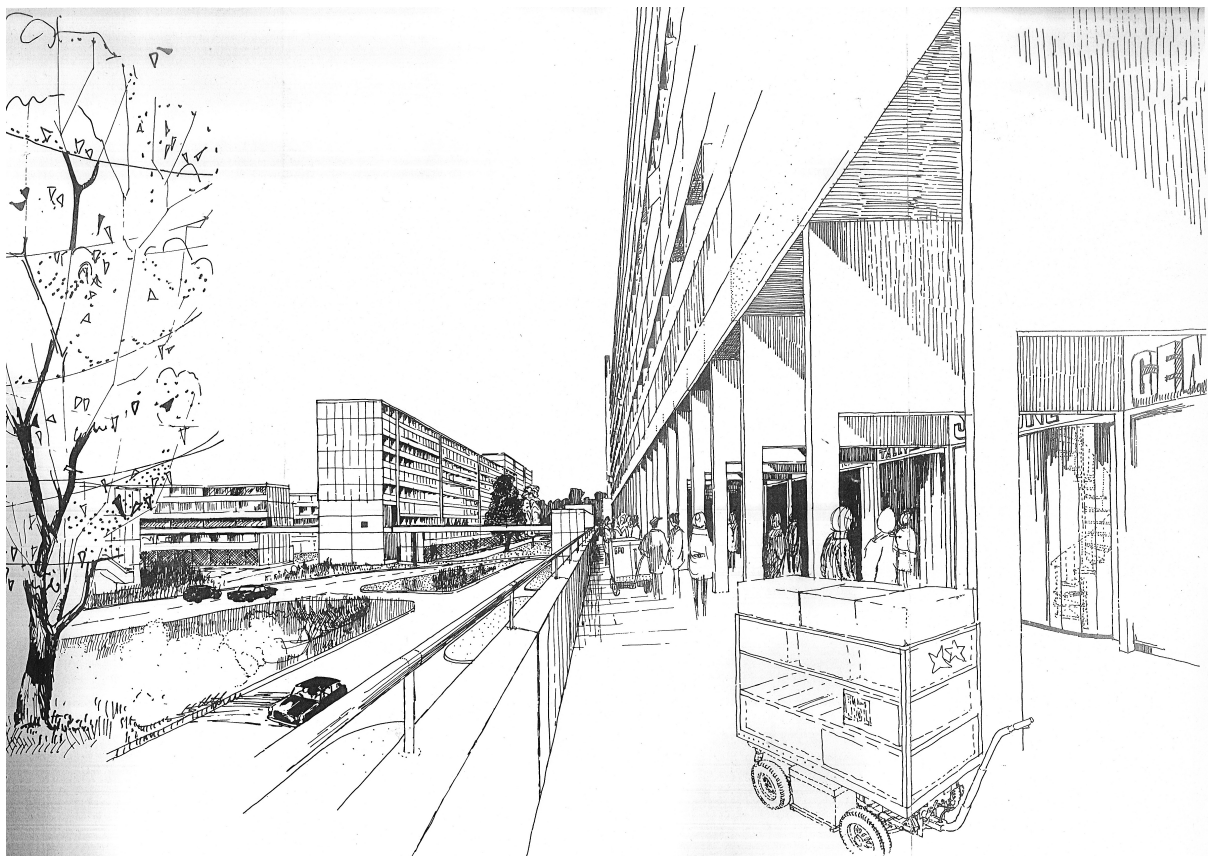

Figure 1 Architectural plan looking south towards Burgess Park on a proposed new road, now Thurlow Street (*source*: Southwark Local History Library and Archive Collections)

Architectural practices of verticality did not end once the design was approved and the estate built. Over the years other architects, social scientists, journalists, artists and policy makers have critiqued its vertical architecture. As a result, some architects on the original team have involved themselves in a process of contemplation and understanding. This is an architectural practice of verticality since it is the outcome of producing vertical design. It also involves embodied vertical experiences, such as the architects imagining the estate's vertical landscape and its possible effects. Through this process the architects now believe that a combination of limited detailed theorisation of vertical design at the time, the short time frame allocated and constraints of the brief meant that design mistakes were made. The vertical separation of cars from pedestrians was too simplistic, resulting in limited street life on the ground and illogical vertical behaviours. For example, residents living in ground floor maisonettes walk up to first floor walkways to enter their front doors, before walking down again to access their living spaces. As one of the architects stated in hindsight, design that facilitated vertical movement on the estate needed greater consideration:

> the communal circulation was not given I think quite the same sort of priority in our minds so that standing around waiting for a lift … the Smithson's were going on about streets in the air … what they didn't talk about quite so much was what it was like to get from the ground to the street in the air. And I think we didn't put too much, I don't know, but it wasn't seen as the kind of arena for inventive design.

Both the architectural discipline and popular culture tend to focus on the architects of 'successful' buildings, but the architects of structures perceived as 'unsuccessful' also deserve exploration. The legacy of being an architect on a project like the Aylesbury Estate does not just involve rational post-evaluation, but an emotional response when encountering the architectural community and public. This does not mean that there were no positive aspects to the estate's vertical design. The architects' consideration of design mistakes is balanced against their practical recognition of more successful design features. The flats were well designed and built to Parker Morris standards. The high-rise blocks were built along a north-south axis to maximise sunlight in flats and one-bedroom units had large dual facing windows. The flats were an expression of modern urban living with fitted kitchens, flexible spaces, built-in storage, indoor bathrooms, hot water and convection heating via a centralized district heating system. A health centre, playgrounds, youth club, community centre, plus communal laundry rooms and units for shops on vertical walkways were also built.

Following the Smithson's 'streets in the sky' concept, their location on walkways meant that pedestrians could walk unimpeded by the automobile. For these living spaces of the estate, the architects did consider the domestic believing that organized and functional spaces could generate positive feelings and help to make home. It is these more positive dimensions of the design that tend not to be discussed and practiced outside the estate due to stigmatisation.

[A] Vertical practices on the estate

Once the estate was built and residents began to move in the late 1960s, new practices of verticality emerged amongst its different vertical levels. These practices, which involve new social configurations, material arrangements and embodied experiences, actively produced verticality on the estate. Since they unfold in a domestic urban landscape, they are also intertwined with home. A significant part of residents' everyday lives, the vertical practices helped to make the estate a unique home. However, they also unmade dimensions of home when interacting with the estate's marginality.

[B] Making the high-rise home

Home-making is a complex practical activity that involves the addition of material and imaginary dimensions to home. Time ensures that the experiences, memories, possessions and relationships involved become meaningful. The process of home-making can be intensified if activities and experiences are particularly valued because they are novel, new, engaging or intrinsically pleasurable. This is what verticality has partially contributed at the estate. For example, the vertical walkways enabled a multitude of positive vertical behaviours and experiences. Modern technological forms in the 1970s, some residents stated that the walkways looked 'novel' and 'interesting'. The Aylesbury architects envisaged efficient and rapid pedestrian flows on the walkways, in alignment with modernist principles. Not only was this partially realized, but the vertical practice of efficient walking could also induce positive feelings and thoughts that contributed in emotional attachment to the estate (i.e. they helped to make it home). Betty, an older resident who was one of the first to live on the estate, appreciated this rational movement:

> Well I thought they were wonderful really … say I wanted to go shopping in Walworth Road. You would just go down and you could walk all the way there above ground, it was so easy.

Vertical practices on the walkways could be strongly implicated in community, a dimension that tends to be omitted in literature on verticality (see Harris, 2015). Although the 'streets in the sky', so important to Le Corbusier and the Smithsons, were never as successful as the Aylesbury architects intended, there were butchers, bookmakers, newsagents and laundry rooms at various points in the estate's history. In the 1970s laundry rooms on first floor walkways, which were originally free, were places where residents conversed and got to know neighbours. Counteracting the absence of communal shared spaces inside the high-rises (see also Yancey, 1971), such sites facilitated community and attachment. Jephcott (1971) argued that the newly built high-rise estates in Glasgow in the 1960s-70s destroyed the practice of 'hing' found in old working class neighbourhoods with tenement housing. Residents could often be found sitting next to their windows to watch street life below or talk to neighbours on the street. This has been part of a critique that the high-rise's design decreases community ties (Newman, 1972; Kearns et al., 2012). However, a similar vertical practice was in evidence at the Aylesbury Estate. Some residents in flats immediately above walkways or ground level would regularly talk to neighbours from their flats through open windows. This vertical practice, therefore, helped to increase community ties and feelings of belonging and home (see figure 2).

Figure 2 Jasmine looking down from her dining room to the first floor walkway below (photo by author, 2013)

The walkways were also subject to other unforeseen positive practices. For example, children growing up on the estate used the walkways to enhance their play and create exciting vertical experiences. One resident, Seth, who lived there as a child with his parents in the 1970s stated:

> … on the Aylesbury I remember, action man, I would always play action man and be throwing them off the ramps and letting them parachute down onto the grass. That would be, because you've got the height. And then you'd run all the way down and run all the way back up again and just keep doing it.

Illustrating how verticality can be inscribed onto memory, Seth and other residents remembered the estate as a magical vertical playground involving a range of novel practices and experiences. There was BMX racing on the long straight sections of walkways and biking over self-made jumps positioned at the bottom of ramps to walkways. Different forms of play took place at other levels on the estate. As also found by Jephcott (1971) in Glasgow, playing up and down in lifts was a popular pastime as was kicking a football in top floor corridors of high-rises, such as Bradenham and Chartridge House. Demonstrating the

excitement that height can generate, Seth fondly recalled that 'When you're young you want to get as high as possible. You want to go high'. The children's enjoyment did not just come from enacting tried and tested play, but from discovering new forms of vertical play through exploration and experimentation over time. Encounters with this new vertical architecture of modernity resulted in them being on the 'cutting edge' of play. Similar to 'horizontal' practices (see Schatzki et al., 2000), this means that practices of verticality are not fixed but are creative acts involving emergence and transformation. The exhilaration of the children was further magnified through doing with others since this produced a bond and friendship. For Seth, this all culminated in a strong feeling of happiness and home on the estate, which he still yearned for in the present:

> It was a place where all my friends were and had grown up in a happy caring home with really good friends … all the kids played happily together, you know, that was the happy times, yeah … I remember saying I didn't want to leave [in the late 1970s] and, you know, I wanted to stay there, and if they took me then I'd run, I'd run away at the first opportunity and run back to Aylesbury so I could be with my friends and play.

The Aylesbury Estate is comprised of both high-rise and lower rise blocks. The extent and type of verticality in flats is heterogeneous, with the intensity of vertical practices increasing with height. Within the private sector this, of course, explains why property prices rise with floor. However, this does not mean an absence of vertical practices and experiences for flats on lower floors. Large and ever visible from windows, the high-rises on the estate are often a part of domestic life in lower floor flats. Just as everyday verticality involves looking up as well as down (Harris, 2015), some residents on lower floors regularly looked up at the high-rises. As Sandra, a leaseholder on one of the lower rise blocks called Northchurch, stated 'Yeah, sometimes I look at, you know, Taplow [one of the high-rises] from my kitchen and study. It's quite big and high. You know, I look up at the windows and curtains and wonder what people are living there' (see also figure 3). Again this engagement with the high-rises can be a communal practice involving a series of meanings and interpretations expressed through everyday talk. Situated in different cultures and contexts, people respond differently to high-rise architecture. Sandra noticed this as she often had friends to stay from California:

One of them didn't like Taplow at all and actually wanted to leave. But some of my friends who stay like them … One of them said to me you know 'It's like looking at something and being in an Alfred Hitchcock film … It's really exciting'.

Figure 3 Taplow, one of the high-rises, from Sandra's window in her study (autophotography, 2013)

Flats on the higher floors of high-rises on the estate receive a more expansive range and intensity of vertical practices. In this way, high flats are arguably the fullest expression of vertical homes. Supporting Melhuish's (2005) finding at higher floors of the Brunswick Centre in London, the feeling of seclusion can be an important aspect of such homes. Although this can seem counterintuitive given the proximity of neighbours, high flats can be very quiet if they are well insulated, as is the case at the Aylesbury Estate, since they are some distance from ground level noise. London's architects and planners in the 1960s-70s also tended to leave space in-between high-rises so flats can feel private as people cannot look in. As Jemma, who has lived in her flat on a high-rise called Wendover with her husband for over 40 years, stated 'up here you're in your own world, nobody can see in and you've just your own life haven't you … we hardly ever hear them [neighbours] do we? I think that's why we've stayed here so long really [laughs]'. This distinctly vertical

experience of being 'in your own world' is related to the material design of the high-rise interacting with height.

Emphasis of the non-human in vertical literature has tended to focus on inanimate technologies, such as drones and concrete (see Graham and Hewitt, 2012). However, there is more scope to explore the organic non-humans involved in verticality. Where high flats on the Aylesbury Estate have balconies, some residents have turned these into urban gardens with potted plants, herbs and vegetables such as tomatoes. This can help compensate for the absence of the typical garden associated with two storey homes. Gardens on high balconies involve vertical practices since their non-human inhabitants experience different environmental conditions, such as exposure to the wind, rain and sun, to that found on the ground. Ginn (2014) argues that gardens and their non-humans are just as much a part of the domestic as humans. For some residents they are also important actors in making home, generating positive feelings and attachments. Such warmth, however, is not reserved for all the non-human inhabitants of high balconies. A common occurrence throughout London's high-rises, pigeons are undesirable visitors because they leave 'droppings'.

One of the most recognized expressions of verticality in high-rises is, of course, the view. Jacobs et al. (2010) appreciate the view as a performative act held stable by actors, such as window technology and policy regulations, in networks. I would like to build on this approach by paying more attention to the localized and complex vertical practice of viewing rather than its situation in wider networks. The view is an embodied and multi-sensory experience. In terms of vision, it involves an image of an urban landscape that contains depth through perspective. Natural and artificial light also contributes to this sense of depth through contrast and alters the atmospheric affect of the landscape, particularly from day to night. As intended by the Aylesbury architects, perspective and light provide residents with a feeling of spatial extension towards the horizon (see also Glendinning and Muthesius, 1994). This involves a direct relationship between the vertical and horizontal since increases in the vertical expands horizontal space. Sunlight entering flats also has visual and tactile elements. It possesses an ethereal visual quality in high flats because it is direct light not refracted from the ground and also contributes warmth as it comes into contact with the human body. Ultimately, this complex verticalized milieu produces pleasurable bodily experiences and emotional states with residents commonly stating that the view is 'beautiful', 'lovely' and

'wonderful'. For Alex, who has lived in her flat on Wendover since the 1990s, the view can be central in the making of a special home:

> Immediately fell in love. The space, the big windows, the view and I couldn't believe my luck. And I went to council after that and I said 'I'll take it' and I wasn't hesitant … As soon as I moved in I felt like, you know, that I am home immediately. It felt the kind of positiveness in this place, every single when I opened the door the view and light just strikes me and makes me smile, and then the being happy to come in home, here. I love here. I mean I just love it.

Figure 4 The vertical practice of viewing: Alex sitting at her dining table (photo by author, 2014)

The view involves a diverse set of vertical practices, which can differ between residents and homes. While some residents passively looked, gazed and felt, others more consciously engaged with the view thinking about urban history or looking for change in the landscape. Again highlighting the temporal nature of verticality, this illustrates how the view is a dynamic and moving scene. Viewing also involves multiple bodily positions with residents standing at 'special' locations in flats or on balconies, or sitting on chairs, armchairs and sofas. The latter indicates that the view comprises complex relations beyond the individual

body. With furniture often positioned to take best advantage of the view, there is a verticalized material culture. Some, but not all, residents placed dining tables, sofas, coffee tables and beds next to the large windows to be as close as possible to the view. Others aligned armchairs and sofas in living rooms towards the view and only closed curtains when it was too bright. Literature on housing has tended to associate issues of community with the high-rise's shared spaces (Kearns et al., 2012; Newman, 1972). However, these verticalized material configurations in flats were often important actors in communal practices, such as having family and friends over for coffee or dinner. This means that the view is not just an individual experience, but also a communal practice that can enhance ties of family and friendship. As one high-rise resident called Violet, who was originally from Peru and lived on Taplow, stated:

> When I have my dinner and then when I have friends are coming for tea or dinner whatever, or family. Sometimes family come and stay over here for one or two days and then we use the table [next to the window]. And so is it nice to kind of sit there and look out at the view … I have a sister who came from Peru three years ago, she came to visit me for six months and my sister she really loved it. She used to sit just in the, in that chair and then sitting and counting the planes passing and she used to sit there and say 'I'm going to live, I love this place, I like being here with you'.

[B] Unmaking the high-rise home

The Aylesbury Estate is a 'marginalized home'. This concept argues that literature on home has tended to associate marginality with unequal power relations within households. By comparison, the marginalized home also focuses on instances when the entire boundary of home is subject to intense forces of marginality, such as on dispossessed estates. The social and economic marginality of the Aylesbury Estate, it was in the bottom category of the ACORN classification in the 1990s indicating high deprivation (Lees, 2014), has interacted with its vertical architectures. This has coproduced negative vertical practices that unmake, or dismantle, dimensions of home such as feelings of belonging and attachment (see Baxter and Brickell, 2014). This, of course, contrasts with the previous section that explores how verticality makes home on the estate.

The association of vertical shared spaces in high-rises, such as stairwells, lifts and walkways, with anti-social behaviour and crime has been critiqued on the basis of design determinism (e.g. Hillier, 1973). However, I argue that characteristics of the Aylesbury Estate's shared spaces produce negative vertical practices in conjunction with processes of urban marginality. For example, as well as being spaces of positive experiences, the vertical walkways have also been associated with negative behaviours. Some residents complained of noisy motorbikes being ridden at speed on the walkways, which obviously impacts on the enjoyment of home, and of individuals throwing bricks at cars passing below. The council installed steel barriers across the walkways at certain points, in response, to discourage motorcycling. A section of walkway above one of the main roads, Thurlow Street, was also demolished to stop people throwing bricks. Following Coleman's (1985) research, the police also argued that the walkways were helping criminals to escape.

The stairwells and lifts in the Aylesbury Estate's high-rises were fine most of the time, but sometimes they were associated with anti-social behaviour and crime. Not anticipating the estate's marginalisation, security was not a concern in the original design and the high-rise entrances were open. Residents stated that outsiders sometimes entered the buildings to use drugs on the stairwells and I interrupted this activity a couple of times during my visits. This is a vertical practice since it is coproduced through interactions with the stairwell architecture and the outsiders experience verticality while sitting on the stairs. The high-rise lifts, normally places of mundane vertical practices as illustrated by the documentary film *Lift* (Isaccs, 2001), are interesting mobile vertical spaces that deserve further ethnographic examination. Social norms still govern lifts in marginality, for example one resident smoking a 'joint' put it out before joining us in the lift. 'Don't want to expose you to my goodness' he joked. However, as others have illustrated in other marginalized high-rise homes (Lees and Baxter, 2011), lifts can be particularly vulnerable places because of their confinement. As David, ex-Chair of one of the Tenants and Residents' Associations, stated about lifts at Bradenham in the 1980s:

> It was quite a frightening time really because my wife was mugged about six times coming home. Getting in the lift and stuff like that and she wasn't the only one, it used to happen a lot. Someone would get in behind you and that was it, like you know, they'd sort of threaten, rob you.

These were not the only vertical practices of anti-social behaviour and crime that could make life uncomfortable for residents and unmake home. Car parks underneath high-rises, which possess a subterranean verticality (see Graham and Hewitt, 2012), were considered unsafe and subsequently closed. Simon, a TV engineer who lived at Taplow in the 1970s-80s, stated that not only was his van often vandalised and broken into, but that the 'car park at night was a little bit spooky so to speak 'cos it was very quiet, very isolated and quite dimly lit, which could give you a sense of, you know, someone lurking around'. This embodied vertical experience was the result of memories of past negative encounters in the car park and a 'spooky' atmosphere, which was produced by its subterranean design in alliance with the estate's social and economic marginality.

For *some,* but not all, residents the possibility of encountering negative vertical practices in the shared spaces, such as in car parks, walkways, stairwells and lifts, meant that the journey from the edge of the estate to flats, and vice versa, was an unsettling experience (see also Lees and Baxter, 2011). Even if crime and anti-social behaviour was not encountered, such trips could involve emotional discomfort depending on past experiences and the social position of the resident, for example older women can feel more vulnerable. This illustrates how individuals and social groups can be differentially positioned within verticality. Such negative mobile experiences associated with verticality unmake the home because they can result in the loss of domestic material possessions, such as with theft, or dissolve positive emotions and feelings of safety important in home making (Baxter and Brickell, 2014). They can also contract the scale of home, with some residents feeling at home in their flats but not on the estate. As Jasmine, a woman in her 20s who has lived at Wendover her whole life, stated:

> It's not until I open my door and I'm safely inside that I feel like … you know, but walking outside, I don't necessarily feel at home.

Vertical practices that unmake home are not just related to the estate's indefensible spaces. The different vertical levels coproduced other vertical practices, such as throwing materials from higher floors. Again highlighting the non-human in vertical practice, rubbish and other household objects thrown from high floors have resulted in physical injury, emotional distress and behavioural changes. In this instance the intensity of the vertical effect on passers by below, such as on their emotions, is seemingly related to geometric notions of height. The

higher the floor material is thrown from, the more acute the vertical experience. However, the affective response also involves the perception of height, since material thrown from a higher floor but some distance away (horizontally) from passers by below has less impact on their everyday experience. Persistent negative vertical practices involving the throwing of objects have also co-created new vertical home cultures. Some residents only walk underneath the covered areas of first floor walkways, supported by pilotis (or pillars), to avoid potentially getting hit from above (see figure 5). In the second floor dining room of her maisonette, Jasmine also often looks out the window upwards to try and locate the origin of nappies thrown onto the first floor walkway outside her front door. As she states below, some materials thrown from above can be particularly harrowing and unmake the home:

> I remember another time, someone's body had been thrown from the eighth floor down, apparently a young lady of Turkish or Greek descent. Rumour has it that she was a prostitute, I'm not entirely sure. But the idea that someone's body has been thrown from the top floor, and we're on the second floor, to me it was like why is this happening in my world? There used to be signs, you know, 'Murder', you know.

Figure 5 First floor walkway at Wendover. Some residents walk under the covered area in case material is thrown from high flats above (photo by author, 2014)

Although residents were broadly positive about their flats, there was evidence of some negative vertical practices. Vertigo, the whirling sensation that some bodies experience when looking down from height, was a rare but negative flat experience. For example, Cassandra, who had lived in her high flat at Taplow since the 1970s, stated that cleaning the flat's windows made her 'feel sick, funny and phobic'. The windows have not been changed since their installation in the 1960s-70s and residents have to peer over the side of the buildings to clean them because they are based on a tilt mechanism. A comparatively common vertical practice across social housing high-rises in London (Baxter, 2008), a couple of (white) residents also complained of 'cooking smells' entering through windows from flats below whose occupants are part of a diaspora. An embodied vertical encounter with the 'other' (Sibley, 1995), this resulted in physical aversion and, therefore, a temporary unmaking of home until the smell dissipates. Not only does this allude to the importance of attending to all the senses in vertical practice, but again highlights how verticality can be interwoven with wider social and cultural processes, in this case everyday racial encounters and tension. As Betty, a long term resident at Wendover, stated about her downstairs neighbour:

> She's Nigerian, and she cooks a lot of Nigerian meals. Oh, there's some stuff, I'd tell you you'd want to keep windows, shut the windows. Yeah, when it's fish day, uh-uh. You know that dried fish? Oh, dried fish, stock fish. Oh, the smell, it's like dirty drains.

Negative vertical practices were also implicated in the stigmatisation of the estate. Discussing dispossessed neighbourhoods in Europe and the US, Wacquant (2008) argues that the amplification of negative experiences in marginalized estates in wider society is part of a process of territorial stigmatisation that supports class and race based inequality. Drawing attention to the focus on stabbings, shootings and drugs in the popular press, Lees (2014) argues that the Aylesbury Estate has been portrayed using a pathologizing language. There is more scope to examine the range and complexities of stigmatisation processes. In this light, the devaluation of modernist high-rise estates is intensified through the vertical, with high-rise homes subjected to a double stigmatisation through being a 'council estate' and possessing vertical qualities. Examples of this include the practice of taking unsympathetic photographs of high-rise architecture on dark rainy days with the camera often pointed upwards to convey enormity (see Stallabrass, 1999, for a critique of artist Rut Blees Luxemburg). Making the vertical sinister adds another layer to processes of estate

stigmatisation. This, of course, has severe implications for residents who have to negotiate the stigma of not just being 'estate dwellers' but 'high-rise estate dwellers', an affective tension that can dissolve feelings of home. The pathologizing practice of the vertical is also implicated in a finite and extreme unmaking of home. Like other high-rise estates around the UK, the council and other organisations disputed the structural integrity of large panel systems (LPS) in high-rise blocks, which once symbolized the new modern age. As a local newspaper reported in 2005, just before Southwark Council made the decision to demolish the Aylesbury Estate, an explosion from portable gas heaters in flats could cause the LPS to 'fall down like a house of cards' (Denholm, 2005). Such powerful evocations of vertical implosion and death are often deployed to justify demolition and regeneration.

[A] Conclusion

Housing scholarship examining negative high-rise experiences and the reasons for decline (e.g. Power, 1997; Kearns et al., 2012) has been critiqued by research more sensitive to the diversity of residents' lived experiences (Baxter and Lees, 2008). A small number of studies have further begun to examine the high-rise as home (Ghosh, 2014). This matters because high-rises are intensely meaningful places for residents and imbued with attachments, feelings of belonging, memories and personal possessions. Building on this work, this paper has aimed to explore the relationship between verticality and the high-rise home. Drawing on Harris' (2015) call for more research on inhabited landscapes of vertical urbanism, it has developed the idea of verticality as practice and documented a number of vertical practices associated with a modernist high-rise estate, the Aylesbury Estate, in London. It has investigated how these practices produce vertical designs and architectures, result in the embodiment of verticality, and co-construct vertical meanings, feelings, memories, behaviours, relationships and material cultures. They also involve the non-human, such as plants, and time. Although some of these vertical practices, such as throwing nappies out of windows, will be limited to marginalized modernist high-rise estates (see Baxter, 2008), many of them, like the practice of viewing, will be recognizable to high-rise residents across the globe. Meanwhile, vertical practices will be found wherever there are different vertical levels. They can be found across a myriad of vertical architectures and landscapes, including flyovers, tunnels, airplanes, offices, mountains, oceans etc. As a result, future vertical urbanism research can continue the project of documenting and analyzing the complexities of

vertical practices across urban and non-urban spaces. It can also explore how such practices are implicated in home.

This focus is timely because of the intensification of vertical homes, particularly high-rises, across the world (Harris, 2015). I have argued that verticality can be intertwined with home. A number of vertical practices, which are not found in low-rise dwellings, actively make a special home with unique vertical experiences, material arrangements, relationships, communities and, therefore, attachments, memories and feelings of belonging. Moreover, if verticality as practice argues that verticality is not something that takes place *in* vertical landscapes but is actively constructed through action, then this foregrounds how verticality is engrained onto the body, memory and identity over time. This means that verticality does not just matter to residents, but can be central in their 'being' at home, in the phenomenological sense. Some residents are not just ordinary dwellers, but *high-rise* dwellers (see Ingold, 2008). Vertical practices co-construct who they are in the world.

The literature on home should take note not just because high-rises are becoming even more important forms of urban domestic inhabitation, but also because the paper shows how certain urban processes, in this case verticality, can construct novel experiences and intensify home. For those interested in high-rise estate demolition and regeneration, this vertical intensification of home exacerbates the injustice of displacement especially when residents are moved into low-rise housing. Although such housing may contain mundane verticalites (that are themselves in need of attention), such as looking up at the sky from windows, they do not have the same intensity or scope as the vertical practices left behind and lost. Finally if scholarship on home is to take exploring the city as home seriously (see Blunt and Bonnerjee, 2013), it will inevitably encounter the myriad of vertical spaces currently being revealed by the vertical urbanism literature, such as sky parks and flyovers (Harris, 2011). Literature on home should, therefore, move beyond its horizontal assumptions (Weizman, 2007) to open up to the verticalities of urban life.

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