CO-LIVING WITH LEFEBVRE
The Production of Space at The Collective Old Oak

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Summary

This paper sets out to examine the space produced at contemporary commercial co-living facilities by focusing on a case study of one prominent example of the form, The Collective Old Oak. Furthermore, it places this space in context, discussing this instance of co-living in relation to the current economic conditions of London.

The Collective Old Oak is located in Willesden Junction, a neighborhood in northwest London (NW10). The facility has 546 residential units spread across its top ten floors. Each unit is small—more are only 9.2 square meters. However, in addition to the private residential units, the building features more than 10,000 square meters of common space, some accessible only to residents, some accessible to the general public. Each residential floor is anchored by a communal kitchen which is shared by all residents. The building also includes a library, cinema room, gym, on-site restaurant, and an events space, among other amenities.

Old Oak's particular style of co-living emerges from London's current economic climate, which is defined by an ongoing housing crisis. While the crisis involves many factors, it is broadly perpetuated by a system where the exchange value of housing is emphasized over its use value (Minton, 2017). This dynamic has resulted in changes to the city's socio-economic structure. Low- and middle-income groups are displaced to peripheral neighborhoods while higher-income groups are increasingly physically and socially segregated from the rest of the population. These changes also manifest in the physical fabric of the city, with new spaces such as luxury residential towers being built purely as investment assets (Atkinson, 2018).

In press materials and statements from The Collective CEO Reza Merchant, Old Oak is presented as an innovative solution to the problems of the housing crisis, offering both greater flexibility and an oft-sought sense of community to footloose renters (Brignall, 2016). However, critics allege such living arrangements commodify more traditional communal living practices, encourage social segregation, and are overall a negative symptom of an over-financialized housing market (Lock & Jorgenson-Murray, 2017).

In order to analyse the space produced at Old Oak, this work uses Henri Lefebvre's spatial triad as a framework. This theory is described in the 1974 work, *The Production of Space*, and regards space as socially produced, a product of three spatial "moments." These moments are:

> *Representations of space*: space as understood in a "rational" or "technocratic" sense by architects, planners, scientists, and other authorities or social engineers

> *Spatial practice*: the physical aspects of space and the production and reproduction of routines and relations that it allows or encourages

> *Representational spaces*: how space is experienced by actual users, and is closely related to the thoughts, feelings, and symbols which are used to understand space.

Importantly, Lefebvre's spatial ontology is rooted in material and social relations, so that its understanding of space is closely linked to the economic conditions of its production. Thus, this framework also includes *abstract space*, which is the quantified and commodified space of capitalism. Using this framework, it is possible to understand the space of Old Oak as a complex whole, and better understand how it relates to the economic conditions in which it is situated.
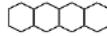
In order to perform this analysis, this research integrates semi-structured interviews with residents and staff, analysis of media representations of co-living, and on-site observations in order to build a thick description of life at Old Oak. The analysis is performed as a journey through the space of Old Oak with heavy attention to detail and context in the tradition of thick description (Geertz, 1973). It begins at the peripheries, discussing representations of co-living in the media. Then, it continues through the physical space of Old Oak, examining the facility's neighborhood, ground floors, residential and communal spaces. Throughout the analysis, quotations from interviews and observations from the site are used to demonstrate how co-living space is produced.

This analysis reveals that the space produced by this particular model of co-living is complex and occasionally contradictory. It is also deeply entangled with the economic conditions with which it was produced. The texture of daily life at Old Oak is composite where the conceived function of the facility is reproduced and contested by practices and appropriations of its residents. The central contradiction that emerges from this interaction comes from Old Oak's dual role as an abstract space and a place for community. The Collective designed and operates the facility as a business and an asset and included elements to optimize it for these ends. While residents may temporarily enliven the space, the planned transience of the population ultimately prevents any sustained community from truly making the space its own.
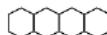
These findings illuminate in which contexts this form of co-living may be successful, and where it may be inadequate. This research suggests that enterprises using Old Oak's model may continue finding success in major cities where a booming economy will attract a young workforce in need of easily-accessible temporary housing. As long as a city's housing market remains as competitive and expensive as London's, this residential arrangement may continue to be attractive. However, while commercial co-living offers a workable solution to a specific demographic—younger, transient, single—it does not appear to be a blanket solution to a city's lack of affordable housing, or the social disruptions such a crisis causes. Spaces like Old Oak appear to offer little in terms sustaining what Lefebvre calls "the acquired characteristics of city life... security, social contact, facility of child-rearing, diversity of relationships, and so on," (Lefebvre, 1974 [1991], p. 364).

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Abstract

The Plan of the Present Work

In the latter half of the 2010s, commercial co-living has emerged as a novel option for housing in several major cities around the world, including London, New York City, and Shanghai (Tomlinson, 2017). While co-living facilities may be poised to become a common feature in the housing markets of global cities, little has been written about this new urban formation. This project begins to build an understanding as to what kind of lifestyles these housing facilities foster and sustain by examining a case study of one prominent example of the form: The Collective Old Oak, located in London's Willesden Junction.

Using Henri Lefebvre's spatial triad as a framework, this case study regards space as socially produced, a product of how it is conceived, perceived and lived. In order to analyze the nature of co-living space, this research integrates semi-structured interviews with residents and staff, analysis of media representations of co-living, and on-site observations in order to build a thick description of life at Old Oak. This social space is considered in the context of London's increasingly competitive and financialized housing market (Minton, 2017), with special attention to how these conditions produce abstract space, Lefebvre's frictionless, quantified space of capitalism (Lefebvre, 1974 [1991]).

The findings demonstrate that the residential space of commercial co-living operations like Old Oak is beset by a tension between its conceived roles as an asset meant to accumulate capital and as a residence meant to cultivate community. This tension is heightened by the actions of residents, which vacillate between conforming to and creatively appropriating the conceived space of the facility.

Introduction

In May 2016, The Collective Partners LLP, a London-based property development and management firm, launched its most ambitious project to date: The Collective Old Oak, a "co-living" living facility located in Willesden Junction, a neighborhood in northwest London (NW10). Billed as "a new way to live in London," the facility consists of 550 micro-apartments—many as small as 9.2 sq. m.—along with shared amenities such as

kitchens, a library, a gym, and co-working space. Old Oak is currently the largest co-living facility in the world, but other projects using a similar model have been constructed in other high-cost cities such as New York, Hong Kong, and Shanghai (Tomlinson, 2017).

Old Oak press materials and statements from The Collective CEO Reza Merchant present co-living as an innovative solution to London's ongoing housing crisis, offering both greater flexibility and an oft-sought sense of community to footloose renters (Brignall, 2016). However, critics allege such living arrangements commodify more traditional communal living practices, encourage social segregation, and are overall a negative symptom of an over-financialized housing market (Lock & Jorgenson-Murray, 2017).

As contemporary co-living facilities are a relatively recent phenomenon—researchers suggest its antecedent form, co-working spaces, only began to become widespread in 2005—there has been little academic scrutiny into how they function, who occupies them, and the texture of the day-to-day life they foster (Gandini, 2015). This research seeks to begin filling this gap by examining what kind of space co-living developments like The Collective Old Oak produce, and how they are positioned in relation to ongoing trends in London's housing market.

Research Questions

Given the broader context of London's housing crisis, the arrival of novel co-living residential arrangements such as The Collective Old Oak seems particularly significant. As this specific type of facility appears to be a recent innovation, there has been very little academic analysis into how commercial co-living functions or what type of residential experience it cultivates. To begin developing an understanding of co-living, this project uses The Collective Old Oak as a case study in order to answer the following two main research questions:

What type of space is produced by co-living facilities like The Collective Old Oak?

How does this produced space relate to the overall dynamics of London's housing market?

To approach these overarching questions, this research will also address several sub-questions, including:

What motivates current residents to choose Old Oak as their place of residence?

To what extent does the Old Oak facility meet the needs of its residents?

What day-to-day practices and social relations are cultivated and sustained by the residents of Old Oak?

How do residents of Old Oak understand their experience with co-living?

How does the design and management of the Old Oak facility influence the living experiences of the residents?

To what extent does life within Old Oak match the aspirations projected by the facility's management?

Academic and Societal Significance
Academic

In "Minimum City? The Deeper Impacts of the 'Super-Rich on Urban Life," Atkinson et. al. ask, "what have been the social and spatial ramifications" of the increasing influence of wealth and economic inequality in the city (Atkinson et. al., 2017, p. 254)? This study contributes to the growing literature on the changes taking place within London as it further transforms into a "plutocratic" or "minimum city." Specifically, this study examines co-living as a new development in London's evolving housing market, a market that increasingly "privileges the privileged (and absent investor landlords)," (Atkinson et. al., 2017). As co-living facilities like The Collective Old Oak are a fairly recent phenomenon,

this study is an important initial foray into understanding this new form of urban residence.

Additionally, researchers like Morisson have pointed out that disruptive technological innovation is increasingly pushing post-industrial cities toward knowledge-based economies. Therefore, it is important to understand the new social environments that may result from this change, "new social environments—such as hacker spaces, maker spaces, Living Labs, FabLabs, shared living spaces, co-living, and co-working spaces," (Morisson, 2017, p. 2). As more cities make such a transition, ongoing examination of these new spaces and how they operate will be crucial to describing their proliferation, impact, and development. Studies such as this one, which describe novel forms as they are still emerging, are particularly useful. If a form becomes common, the study provides insight on its origin and genesis for future research; if the form fails, the study becomes a record that prevents the experiment from falling into obscurity.

Finally, this study is especially relevant as past assessments of these "new social environments" have been more celebratory than accurate, often failing to account for social inequalities and class divisions (Gandini, 2015, p. 201). Thus, critically analyzing the space produced by this nascent form of co-living, giving a thorough account of both its potentials and pitfalls, will work against such shallow understandings. Positioning these more nuanced assessments in relation to larger trends in London's housing market is an important step toward accurately understanding contemporary co-living in context.

Societal

There is a broad consensus that London is undergoing a "housing crisis," or a drastic restructuring of how housing is developed and distributed (Minton, 2016). Co-living is often presented in the press as a possible solution to the ongoing deficit of accessible and affordable housing within the city (Mairs, 2015; "London Co-Living Space Offers Housing Crisis Solution," 2017). Additionally, co-living developments have already attracted more than one billion pounds of investment capital in London alone, and The Collective is currently planning to open two additional co-living facilities in Stratford and Canary Wharf (Vaish, 2017).

Considering these indicators, co-living facilities may be poised to experience the same rapid and wide dissemination as co-working spaces, which by some accounts grew in numbers from a mere handful to more than 2500 in just half a decade (Merkel, 2015). Therefore, it is important to understand as much as possible about this novel housing model, including how it is designed, used, and represented. This study begins the important task of developing a detailed and methodical account of the social space produced by commercial co-living. Such information could be crucial for informing the future decisions of planners, policymakers, and potential residents.

The Collective and Old Oak

The following section provides a brief account of the history of The Collective as well as a description of Old Oak, its surrounding area, and the basic costs associated with living in the facility.

The History of The Collective

Old Oak is the flagship property of The Collective Partners LLP, a real estate development and property management company based in London (Company Overview of The Collective Partners LLP, 2018). The Collective was founded in 2010 by Reza Merchant, who at the time was still a student at the London School of Economics.

The original business plan for The Collective was focused on delivering high-end housing options for students, a demographic that Merchant felt was underserved by the current market (Allen, 2014). Leveraging his parent's substantial assets, Merchant was able to secure a £1.8 million bridging loan to begin developing properties for the student market. The first project, The Camden Collective, involved renovating a former hostel into a multi-unit, all-inclusive residence to be rented by the room. The property was targeted toward "lifestyle tenants, typically professionals in their twenties or early thirties, who like the flexibility and freedom of renting rather than home ownership," (Hall, 2013). This model was replicated in other desirable neighborhoods across London including

Hyde Park, Kings Cross, and Notting Hill. By the end of 2014, The Collective operated 20 buildings, housing 350 tenants (Allen, 2014).

The Collective Old Oak opened in May 2016. The project, which was privately funded by a family from Singapore, represented a massive increase to The Collective's real estate portfolio Brignall, 2016). The resulting press coverage also substantially raised the public profile of the company. Recalling The Collective's original mission, the building was initially designed to be a student housing complex (Building Construction Design, 2014). The original planning permission for the building called for 100% student occupation, however, this was revised down to 70% student occupation in 2014, and again to 20% student occupation in 2016 (Wellman, 2016). By the time it opened in May 2016, the facility was largely branded as "co-living" and targeted toward non-student professionals. The project was heavy covered by the general British press as well as in niche outlets dedicated to the real estate business, the tech economy, and architecture and design. This intense coverage made co-living a more recognized concept for the general public and helped establish Old Oak as the quintessential example of the form.

The Location of Old Oak

The Old Oak facility is located along the banks of the Grand Union Canal in Willesden Junction, a neighborhood in Zone 2 of West London, NW10. The surrounding area is largely industrial and brownfield sites. As the *Financial Times* notes, the building "overlooks Park Royal, one of Europe's largest industrial estates; to the east are the reflective roofs that make up Cargiant, London's largest used car dealership," (Cox, 2016). Other major features in the immediate area include Old Oak Common traction maintenance depot, Wormwood Scrubs men's prison, and Harlesden, a working-class neighborhood unofficially known as London's reggae capital (Wallinger et al., 2014).

However, the area is predicted to dramatically change in the coming decades. The Old Oak Common neighborhood—the namesake of the facility—is the site of the UK's largest urban regeneration project. Managed by the Mayor's Old Oak and Park Royal Development Corporation, the £10 billion regeneration plan was launched in April 2015 and aims to completely remake 650 hectares of industrial, commercial, and brownfield sites into London's "Canary Wharf of the west" (Lesslie, 2016). The plan includes a

transportation superhub at the nexus of the currently under-construction HS2 and Elizabeth Line, as well the development of 25,500 new homes over four decades (Introduction to the Old Oak and Park Royal Development Corporation, 2017).

The Collective Old Oak

The Old Oak facility was designed by PLP Architecture, a London-based firm that has designed several other high-profile projects including 22 Bishopsgate, set to be the tallest building in the City of London. The building itself is situated at the site of a 1970s-era office block. It stands 11-stories tall and is structured as two rectangular volumes overlapping on a central podium—the staggered arrangement of the upper blocks creates space for roof terraces on the podium and dramatic overhangs below. In total, the building contains more than 17,000 square meters of space. The facility has 546 residential units spread across the top ten floors. The majority of these rooms are arranged as "twodios," which are two residential rooms (9.2 square meters) which share a small kitchenette (5.8 square meters). The building also has a number of stand-alone studios (13.4 square meters) which have private kitchen facilities. Residential rooms are arranged along central hallways, with about 50 to 70 people living per floor.

In addition to the private residential units, the building features more than 10,000 square meters of common space, some accessible only to residents, some accessible to the general public. Each residential floor is anchored by a communal kitchen which is shared by all residents; the kitchens on the top three floors are distinguished by windows and themed decor. Floors two through seven also feature one type of common space each: floor two holds the laundry room, three holds the spa, four holds a multipurpose space called the Secret Garden, five holds the cinema, six holds the games room, and seven contains the library. The other common spaces are found on the ground floor. These include a reception area and lounge, a gym, a co-working space called The Exchange, and an auxiliary lounge and events space. From the residential floors, it is also possible to access an elevated outdoor roof terrace. These floors are all serviced by a bank of two elevators.

The facility also stands out for its focus on providing activities and programming for residents. The Collective employs a fluctuating number of full-time community managers

who are responsible for scheduling events such as film screenings, dance classes, and networking events. There are also monthly "town hall"-style meetings and weekly community drop-in sessions where residents can interact with each other and staff in order to provide feedback and make requests. The Collective has also tested a "buddy system" pilot program, where newcomers to the facility are paired with current residents.

Beyond common spaces for the residents, the facility also houses several businesses accessible to the public. For instance, desks at The Exchange co-working space can be accessed with a monthly fee (£150), likewise for the gym, which is branded as ENRGYM (£34.99). Additionally, the ground floor contains SimplyFresh, a self-described "upmarket grocery store," and The Common a restaurant and bar with an outdoor terrace on the banks of the canal. While some areas are open to the public, parts of the building are protected by key-card entry, numerous CCTV cameras, and a private security team on-site 24 hours a day (Foulds, 2017).

Also of note is The Collective's close ties to the start-up and venture capital sector. In addition to residential units and common living spaces, the facility also houses a "hot-desking area" and co-working space—both spaces associated with "knowledge economy" and start-up work (Gandini, 2015). In 2017, The Collective also hosted the Collective Global Accelerator, a live-in program where young entrepreneurs are invited to live in Old Oak while they "learn how to build their business and brand" (Bakewell, 2017). Additionally, the Collective advertises that it has existing partnerships and discounts with several high-profile startup services such as Zipcar, Spacelove, and Zipjet ("What is Co-living?," 2017).

The cost of renting a room at Old Oak—also called "becoming a member" in the company's parlance—has varied over time as various prices and arrangements have been offered as promotions. As of June 2018, the stated prices on the Old Oak website are £245 per week for a studio with shared kitchenette and £290 per week for a private studio. Leases offered vary in duration from nine to twelve months. The rent paid on each lease includes costs such as council tax, utility bills such as water and electricity, periodic room cleaning, and internet service. Access to the gym and co-working facilities through a "hot desking" membership is available for £150 per month.

Detailed demographic information about who lives in Old Oak is not publicly available, through news media sources state the facility is currently 97% occupied with most residents falling within the 22 to 35 age range (Mairs, 2017). Finally, Old Oak's press materials and website consistently state that the residents of the facility form a "community of like-minded people."

Towards a Definition of Co-Living

The Collective Old Oak explicitly advertises itself as co-living, which the company defines on its website as "a way of living focused on a genuine sense of community, using shared spaces and facilities to create a more convenient and fulfilling lifestyle." However, this ad-copy description falls short of a workable definition. For the purposes of this research, it is useful to establish a more rigorous description of the housing model in question. To do this, it is important to discuss two crucial aspects of contemporary commercial co-living: first, the types of amenities included in a co-living facility, and second, the difference between co-living from co-housing.

From Co-Working to Co-Living

A 2018 report published by the Royal Society of Arts—and underwritten by The Collective—provides the following definition of co-living:

> A form of housing that combines private living space with shared communal facilities. Unlike flatshares and other types of shared living arrangements, co-living explicitly seeks to promote social contact and build community. Co-living encompasses a diverse range of models, from co-housing mutuals to options in the private rental sector. (RSA, 2018, p. 7)

This definition highlights one of the central features of co-living: its mix of private residential accommodations and public shared facilities. Most of the prominent co-living facilities—including Old Oak, WeLive, Roam—share a similar general layout, where small private rooms are augmented by shared living space such as kitchens, common rooms, and office space.

This type of arrangement is not unique, in fact, it can be found in numerous other types of accommodation, from the architectural experiments of the *Congrès Internationaux d'Architecture Moderne* to present-day student halls (Stewart, 2016). However, the origins of contemporary co-living are more closely linked to the world of co-working than to previous British experiments in intentional communities such as the Isokon Building in Hampstead, which attempted to fuse Corbusian functionalism with communal ideals in the mid-1930s (Jarvis, 2011). This link can most clearly be seen in the case of WeLive, a commercial co-living business owned and operated by the co-working giant WeWork (Aronoff, 2017).

Co-working spaces, as the contemporary form of shared workspace described below, emerged in 2005 in San Francisco (Gandini, 2015). In the following decade, co-working has become an increasingly popular model. This growth is especially pronounced in the wake of the 2008 financial crisis which pushed more people toward contract, freelance, and other precarious types of employment which often don't provide a stable office location (Merkel, 2015, p. 124). By the end of 2017 more than 14,000 co-working spaces were in operation worldwide, serving more than 1.2 million members (deskmag, 2017).

While the exact business model varies, co-working spaces can be described as "office-renting facilities where workers hire a desk and a wi-fi connection… places where independent professionals live their daily routines side-by-side with professional peers," (Gandini, 2015, p. 195). These facilities are popular with freelancers, programmers, and other types of "knowledge workers," and are closely associated with the "creative class" and the "sharing economy," (Florida, 2002; Merkel, 2015, p. 124). Thus, it is common for co-working spaces to distinguish themselves from other temporary office spaces, through "idiosyncratic, bespoke 'Post-Fordist' design aesthetics that blend 'work and play'," (Waters-Lynch, et. al, 2016, p. 10). The Exchange, Old Oak's co-working space, follows this model—its website describes its decor as featuring "bohemian accents with lush greenery and raw industrial edge."

This combination of the professional and social spheres is a crucial aspect of co-working spaces. It is useful here to consider the work of Oldenburg and Brissett, which lays out a three-part classification of social environments. In this system, first place (home), and

second place (work), are augmented by a third place, one that is primarily social, "where people gather primarily to enjoy each other's company," (1982, p. 269). Morisson shuffles and overlaps these terms to create a typology of places in the knowledge economy. In this typology, co-working spaces are a combination of a second place (work) and a third place (Morisson, 2017).

Using the same system Morisson asserts co-living is a combination of first (home) and second (work) places. However, given that contemporary co-living facilities often include third space-like features—such as bars or cafes—it is probably more accurate to place co-living as a fourth place: a combination of home, work, and third place. Thus, it is possible to see the business model of contemporary commercial co-living as an outgrowth of co-working, where private residential areas—first place—have been added to the traditional co-working model of second and third places.

Co-Living vs. Co-Housing

Returning again to the RSA report: the provided definition goes on to distinguish co-living from co-housing, which it defines as "a specific subset of co-living that prioritises resident and community governance." This distinction is consistent with previous literature which identifies co-housing as a form of collective housing that mixes private and communal facilities, but is "grass-roots" in nature and often resident-owned or led (Williams, 2008). These types of residential arrangements trace their roots back to the Scandinavian collective housing models of the 1970s (Williams, 2008) or back to socialist collective housing, the utopian community of the Fourierists, or to the "squatter's movements of the 1980s," (Tummers, 2016, p. 2033).

While contemporary co-living like Old Oak may be influenced by these precursors, its roots in co-working means it often carries the same ownership structure as the most popular co-working businesses. While co-housing arrangements are often communally-organized and owned as a non-profit, co-living facilities are largely not, and are instead founded and owned by property developers or other investors. That is, contemporary co-living facilities are for-profit enterprises which acquire residents though selling leases or memberships as would a co-working space or apartment complex. In fact, despite

various branding around ideas like community, both WeLive and The Collective are primarily real estate and property companies (Aronoff, 2017).

Contemporary Commercial Co-Living

Thus, for the purposes of this research, co-living can be understood as:

> A form of for-profit housing which combines small private living accommodations with shared facilities for work and socializing. While elements are in place to foster community involvement, residency is primarily structured through independent leases rather than mutual ownership.

Understanding London

In order to discuss the space which is produced at The Collective Old Oak, it is necessary to understand the broader economic structures in which it is situated. After all, the production of space is "inherent to property relationships (especially ownership of the earth, of land) and also closely bound up with the forces of production (which impose a form on that earth or land)," (Lefebvre, 1974 [1991], p. 85). Thus a brief account of London's current situation is called for, with special attention to the city's networks of exchange and the urban forms influenced by them.

A Brief History of Housing Production: From Use to Exchange Value

The history of housing policy in London is long and complex; a complete recounting of its intricacies is far beyond the scope of this project. However, it is useful to briefly outline the broad strokes of its trajectory, which can be divided into three phases: the post-war housing boom, the deregulation of the Thatcher era, and the increasing financialization of housing since the 2008 global financial crisis.

At the end of World War II, Britain at large, and London specifically, was facing a severe shortage of housing (Stone, 2003). An ascendant Labour government sought to remedy the situation through the Housing Act of 1949, which allowed the government—largely

through local councils—to build public housing for the general population without means testing or other income restrictions (Minton, 2017). The result was two decades growth that saw nearly three million public housing units put up across the UK (Stone, 2003). In London, this manifested as large multi-story council blocks largely occupied by "the skilled working class and junior white-collar workers," (Hammett, 2004, p. 10). By the end of the 1970s, public council housing made up 40% of London's housing stock and more than one-third of all residents in public house were of above-average incomes (Hammett, 2004; Minton, 2017).

In 1979 the conservative party, headed by Margaret Thatcher, swept into power and instituted a series of policy changes that would have far-reaching effects on London's housing regime. With an eye toward increasing the influence of the market and reducing the role of the state, the Thatcherite government introduced right-to-buy legislation (Hamnett, 2004, p. 14). This legislation forced local councils to sell public housing units to residents for a fraction of the appraised value, however, it also barred councils from using the resulting revenue to build new homes. Throughout the 1980s, millions of council homes were sold off in this manner with few new housings estates built to replace them. New public-sector housing builds declined from around 100,00 per year in the 1970s to nearly zero by the mid-1990s (Bramley, 1994, p. 108) Minton summarizes the repercussions of this policy concisely:

> As the emphasis moved away from building new subsidized council housing, it shifted towards subsidizing housing for people on lower incomes through housing benefit, which was introduced in 1982. This change from subsidizing the *supply* of new homes to subsidizing the *demand* for housing underpins housing policy today. (Minton, 2017, p. 29)

The reorientation of London toward private ownership set the stage for an increasingly tight housing market (Bramley, 1994). This environment was only exacerbated by London's planning policies, which tightly restrict which land can be developed, thus creating artificial scarcity ripe for rampant speculation (Minton, 2017). By the mid-90s, new buy-to-let legislation further encouraged the financialization of the housing market as investors scrambled to buy multiple residential properties as a means to generate passive income through rent and capital gains (Leyshon and French, 2009). These

developments coincided with an overall change in London's economic structure, as the deindustrialization and financial deregulation of the 1970s and 80s put more emphasis on the financial services and real estate sector as an engine of economic growth (Hamnett, 2004; Cunningham and Savage, 2015).

By the turn of the century, a combination of financial deregulation—especially 1986 "Big Bang" deregulation of London's financial markets—increased privatisation, and capital-favoring taxation had solidified London's position as a preeminent global city (Hamnett, 2004; Sassen, 2013). London's status as a central node in the global financial infrastructure, combined with a series of other macroeconomic conditions including a huge rise in wealth inequality, brought waves of capital investment into the city, largely in the real estate sector (Fernandez et al., 2016, p. 2447). The global financial crisis of 2007-2009 did little to change this process (Edwards, 2016), and by 2014 "London's property market is seen as one of the safest bets of almost any asset class, often viewed as outperforming gold, the stock market or any other investment vehicle" (Atkinson, et al., 2016, p. 233).

Many authors see this shift in relation to a larger trend outlined by Thomas Piketty: when capital investment consistently outperforms economic growth (R>G), the outcome will be greater inequality and wealth accumulation (Atkinson, et al., 2016; Burrows et al., 2017; Fernandez et al., 2016; Minton, 2017). Capital owners then attempt to spatially fix the resulting pools of capital by investing in "real estate in prime locations," such as London (Harvey, 2001; Fernandez et al., 2016, p. 2456). Thus, much of London is beset by a financialisation process, where real estate is conceptualized more in terms its exchange value as a speculative investment rather than its use value as actual residential accommodation (Edwards, 2016; Minton, 2017). Fernandez deftly summarizes the cascading effect of the resulting dynamic:

> The most immediate effects are price increases and competition in the other segments of the housing market. If the super rich bid up prices for the most expensive properties, the strata just under this group will inflate the prices for the next class of houses and so on. This has resulted in out-pricing in subsequent price ranges in the already tight housing markets" (Fernandez, et al., 2016, p. 2454)

A Snapshot of London Today

Indeed, the UK as a whole has the fastest long-term growth in both average house prices and the largest disparities in housing prices between regions (Edwards, 2016). There is a wide consensus that London is undergoing a "housing crisis" where the poor and middle-class alike are struggling to find and keep secure residences in the face of rising rents and prices inflamed by a lopsided market (Minton, 2017). This intensification of real-estate-as-asset has impacted not only low- and middle-income earners, but has even begun to affect high-income households (Atkinson et al., 2016).

According to a report put out by the Mayor of London in 2017, "average house prices in London are more than five times their 1970 level after adjusting for inflation," and buyers must borrow significantly more in relation their income to make a purchase (Gleeson, 2017, p. 50). The non-profit Shelter notes that homeownership in the capital has begun to decline for the first time since records began in the 1950s (Shelter, 2017). However, as people are pushed off the property-ownership ladder, they are confronted with a shortage of public housing. Since the 1980s, the share of Londoners in public housing has fallen from one in three to one in six (Kemp, 2016, p. 610) Those pushed into the private rental sector are also hurt by the surging market: the average renting Londoner pays more than 50% of their earnings toward rent, and more than one third rely on housing benefit (Minton, 2017, p. 2013). All this has contributed to an urban environment filled with "middle-class Londoners under the age of 45 who can no longer afford to live in the city" (Minton, 2017).

Literature Review

The ramifications of London's current social and economic condition have been examined from various angles. The following section presents a brief summary of several trains of thought that are instrumental in understanding the production of space at Old Oak.

Capital Accumulation and Alpha Territory

As Glucksberg argues, "an effective perspective on the London housing crisis requires an understanding of what is happening at the highest levels of the real estate market," (Glucksburg, 2016, p. 238). It is fitting then, that many authors have been examining London in relation to what can be called the "financialization—urbanisation nexus," or the "structural process where all players… seek to profit from real estate, which has now turned into a form of financialised asset," with special attention to the spatiality and influence of the super-rich (Forrest, et al., 2017, p. 282).

Using an approach grounded in data from the Great British Class Survey, Cunningham and Savage attempt to create a "geography of affluence," tracking which areas host the highest concentration of ultra-high-networth individuals (UHNWIs), In doing so, they establish a picture of London as a "vortex of economic accumulation," where the concentration of wealth leads to unique economic and cultural patterns which shape the city (Cunningham and Savage, 2015, p. 336). Following a similar line of inquiry, Atkinson et al. use MOSAIC geodemographic data to identify and classify Alpha Territories, specific neighborhoods which contain a high number of socio-economic elites (Atkinson et. al., 2017). The analysis identifies London as a "minimum city," which is increasingly shaped by the needs of capital to the detriment of wider urban vitality and inclusion.

This idea is presented more clearly in a similar study which examines the way "the raw money power of…mega wealth thereby shapes the politics, built environment and social life of cities such as London," (Atkinson et al., 2017b, p. 182). The findings point to a city where universal access to resources is seen as less important than acquiring and catering to the needs of UHNWIs. Burrows et al. reiterate this narrative in "Welcome to 'Pikettyville'? Mapping London's alpha territories," which presents London again as a city increasingly dominated by the financial concerns of the wealthy: "an urban system that has become hardwired to adopting, channeling and inviting excesses of social and economic capital in search of a space," (p. 194).

All these studies indicate that London may, in fact, be suffering from what Christensen et al. describe as the "finance curse," an affliction where an overbearing financial system produces a host of negative consequences including excessive rent-seeking and runaway inequality (Christensen et al., 2016).

Super Gentrification, Segregation, and Cocooning

In addition to exploring the political economy of London's increasing financialization, other authors have investigated the impact these changes have on the social dimensions of the city.

As always, gentrification and displacement are common themes. Authors have covered both the role of austerity measures in pushing low-income households out toward the city's periphery, as well as how state-led new-build gentrification continues to draw wealthier households to the center by selling a specific urban lifestyle (Fenton, 2011; Davidson and Lees, 2005). Additionally, Lees discusses the connection between increased inequality and the process of super gentrification, a process where certain already wealthy neighborhoods—for example, Barnsbury, Chelsea, Hampstead, and Notting Hill—are further transformed by high earners fixed to London by nature of the city's unique economic conditions (Butler and Lees, 2006). These studies corroborate Atkinson's assertion that London is "seeing an acceleration of processes of housing-class dislocations that have a long history in the city," (2017, p. 226). In fact, in a systematic study measuring segregation along several axes places London as the most segregated city in Europe (Musterd et al., 2017).

Other studies show this segregation at work in realms other than housing. Boterman and Musterd demonstrate how lack of exposure to diversity, what they call "cocooning," can be found in places of work and transportation choices, as well as neighborhood of residence (2017). Atkinson uses a similar framework to examine the situation of London, where the wealthy's desire for "spatial autonomy and protected interconnectivity" lead to withdraw into enclave neighborhoods; use of privatized transportation networks; and reliance on secured, exclusive sites of commerce and leisure (Atkinson, 2006; Atkinson, 2016).

Housing Insecurity and Generation Rent

A final facet of research surrounding London addresses those barred from the traditional housing ladder as the result of the ongoing economic climate. This so-called "generation rent," is characterized by "young people who are increasingly living in the private rented sector for longer periods of their lives because they are unable to access homeownership or social housing," (Hoolachan et al., 2017, p. 63).

Minton documents many of the difficult conditions this demographic is subject to, including constant housing insecurity, subpar living conditions, and a rising phenomenon of "middle class poverty," where households with full employment are unable to afford adequate housing (Minton, 2017, p. 102). These findings resonate with work done by Bone, which connects the UK's increasing reliance on private renting with the housing crisis at-large as well as the damaging "psycho-social effects of involuntary mobility, insecurity and socio-spatial dislocation," (Bone, 2014, p. 1).

Methodology

The object of this research is to establish what type of space is produced by commercial co-living facilities and to place that space within the greater context of London as a "minimal city," dominated by the reality of a highly financialized housing market. To carry out this research The Collective Old Oak has been selected as the object of a single-unit, intrinsic case study. This type of case study approach was selected based on the goal of conducting an in-depth analysis of contemporary phenomenon is its real-life context (Creswell, 2016). As the research being conducted relies on uncovering the discourses, perceptions, and experiences of individuals connected to a particular co-living facility, the data collection and analysis conducted will be qualitative in nature.

Case Selection

The selection of Old Oak as the unit of study is based on several factors, the two most salient being The Collective Old Oak's size and its prominence. Consisting of more than 500 rental units, Old Oak, The Collective's flagship facility, is currently the largest co-living facility in the world—WeLive, a comparable endeavour in Lower Manhattan, consists of 200 individual rental units. Additionally, The Collective has raised more than $400 million in venture capital to expand its portfolio by up to 5,000 rental units, including

two more massive projects in London's Canary Wharf and Stratford neighborhoods. Such a large existing operation and such ambitious plans for expansion make The Collective and Old Oak an ideal case for exploring the spatial implications of co-living.

Another factor in the selection of The Collective Old Oak as the object of this case study is the notable amount of media coverage the project has received both from industry-oriented and popular publications. In the months leading up to Old Oak's 2016 opening and in subsequent years, the facility has been covered from a business perspective by publications such as *Financial Times* and *Forbes*; discussed from a design perspective from *Dezeen*; discussed in relation to London's housing market by *CityMetric* and *The Economist*; and from a lifestyle perspective by *Vice* and *Glamour*. While none of this coverage amounts to rigorous academic scrutiny, it nonetheless has sufficiently raised the profile of Old Oak to be the textbook example of contemporary commercial co-living. Founder and CEO Reza Merchant has even referred to the facility as a "proof-of-concept," indicating that future co-living will use Old Oak as a model. Thus, understanding this instance of co-living will remain relevant as more co-living facilities are opened in the future.

Data Collected

In order to analyze the space produced by Old Oak, this study takes a three-pronged approach to collecting qualitative data. This heterogeneous approach to data collection follows Creswell's recommendation that a successful qualitative case study—one that presents a holistic, multifaceted understanding of its case—collects and integrates many forms of qualitative data, ranging from interviews, to observations, to documents, to audiovisual materials," (Creswell, 2016, p. 95).

The first method for collecting data consists of desk research focused on documents relating to The Collective Old Oak. This includes a variety of sources produced about and by The Collective. The materials incorporated range from news articles, first-hand reports from journalists, and interviews with the company's staff, to promotional materials produced by The Collective, and materials posted by residents and visitors on social media. Drawing on such a wide spectrum of documents is desirable for a qualitative study as it allows for the generation of a rich appreciation of the case from a

variety of perspectives. For instance, interviews with founders and other staff in conjunction with proportional materials allow for insight both into how the owners of the site conceive of their project in addition to how they attempt to present that impression to the public.

In *The Production of Space*, Lefebvre warns that relying solely on such representations of space as the basis for a study runs the risk of "reducing the lived experience," and providing an incomplete picture of space (Lefebvre, 1974 [1991], p. 230). To avoid this trap, the second source of qualitative data is sourced from semi-structured interviews with current and former residents of Old Oak, as well as a former staff community manager. These interviews are either conducted in-person at various location throughout London (including on-site at Old Oak) or remotely via the video chat service Skype. Interviews are conducted in a semi-structured format in order to strike a balance between eliciting information on specific subjects while allowing respondents to engage in digressions and provide insights which may not be expected from pre-written questions.

In total, this research relies on seven completed interviews. Interview subjects have been selected based on a mix of purposeful sampling and snowball sampling. The role of purposeful sampling in this research is to include a range of subjects representing a variety of experiences with Old Oak. Interviewees include current and former residents; residents who had long-term and short-term stays; as well as residents from a variety of age groups. To accomplish this, interview subjects were sourced using a variety of methods. Initial subjects were found and contacted through social media while the remaining subjects were contacted through the personal recommendations of interviewees or through chance meetings on-site. The resulting pool of participants thus represents a semi-random collection of residents, though may be slightly biased based on its reliance on a previously existing social network that existed within Old Oak.

Interviews were conducted according to a pre-established interview protocol guided by a loosely structured set of questions. These questions are designed to elicit specific types of information related to the theoretical framework, Lefebvre's spatial triad. Thus, questions are aimed at uncovering qualitative information on the conceived, perceived, and lived nature of space at Old Oak, though many questions linked to all three of these

moments. For instance, a question about a resident's daily routine may provoke a response that contains information both about spatial practices within the building as well as understandings of the intended use of the space. Fully annotated interview guides for both residents and staff can be found in the appendix.

The third source of qualitative data is direct observations of the Old Oak site. These observations come from two points of engagement. The first set of observations are made from the publicly accessible spaces in and around Old Oak—this includes the main common space and reception area of the ground floor of the building, The Common restaurant and bar, and the outdoor areas surrounding the building such as the outdoor terrace and canal zone. Further observations of the access-restricted residential spaces on floors two through ten were made during a guided tour of the facility led by an interview subject. Following Creswell, these observations are broad in scope focusing on the physical aspects of the space, sensory perceptions, and observations of activities and interactions with people within the space (Creswell, 2016). This data also includes off-hand comments made during short, unstructured interactions with residents encountered on the tour.

Data Analysis

All three pools of qualitative data are analyzed using the spatial triad, a theoretical framework developed by Henri Lefebvre and discussed in-depth in *The Production of Space*. As discussed in the section on the theoretical framework, this theory regards space as being socially produced based on a trialectic interaction between three spatial moments: representations of space, spatial practices, and space of representation (Lefebvre, 1974 [1991]). Importantly, these three spatial moments exist in a state of ambiguity, "never either simple or stable," so drawing strict distinctions between the three would be a reductive application of the theory (Lefebvre, 1974 [1991], p. 46). As stated in *The Production of Space*, "lived, conceived and perceived realms should be interconnected, so that the 'subject', the individual member of a given social group, may move from one to another without confusion so much is a logical necessity," (Lefebvre, 1974 [1991], p. 48). Therefore, there is no attempt made to explicitly limit each pool of data to a specific spatial moment, even though in some cases such connections will be stronger than others. For example, while observations of foot traffic within the common

areas may easily be understood as a manifestation of spatial practice, such information can also be relevant in limning aspects of lived space as well. To avoid falling into "rigorously formal" discourses about space (Lefebvre, 1974 [1991], p. 17), a coding system was not used to explicitly demarcate categories of analysis. Instead, transcripts of interviews were read and reread in an open-ended manner.

Thus, in performing this analysis all qualitative data will be analyzed as interconnected, where patterns and insights gleaned from one type of qualitative data are relevant to the interpretation and illumination of any other. In this way, a holistic understanding of the social production of space at Old Oak can be discussed as a complex whole. In examining the various qualitative information collected, this research seeks to uncover patterns and recurring motifs—what Creswell calls "analysis of themes"—as well as significant or telling observations which can be used to characterize each spatial moment. This method of analysis allows for the creation of a detailed account of the social space of Old Oak, as rich and layered as the "flaky mille-feuille pastry" Lefebvre evokes as a metaphor for space as a whole (Lefebvre, 1974 [1991], p. 86).

Despite the interactions between elements of the triad, it is still necessary to present the findings of this project in a legible format. Therefore, the outcome of the analysis is reported as a journey through the space of Old Oak with heavy attention to detail and context in the tradition of thick description (Geertz, 1973). We begin at the peripheries, at Old Oak's representations in the media, where it is first encountered by potential residents. Then, we engage the site as a body would, first approaching from a distance then entering Old Oak's interior. After surveying the ground floor we travel up through the residential levels taking detours to various communal areas. Finally, after exhausting the physical structure, we follow the residents through their electronic devices into the digital realm where space continues to be produced. In doing so, special care is taken to show where elements of the triad overlap, reinforce, and contrast. Following Lefebvre, this analysis should make the hyper-complexity of space apparent by describing the "individual entities and peculiarities, relatively fixed points, movements, and flows and waves—some interpenetrating, others in conflict, and so on (Lefebvre, 1974 [1991], p. 88).

Additionally, once the nature of the various moments of the triad have been unpacked, the produced space will be discussed in relation to abstract space, Lefebvre's conception of capitalist space.

Theoretical Framework

Produced Space

In order to understand what type of space is produced at The Collective Old Oak, it is important to understand what is meant by space. For this purpose, this project draws on the spatial triad, a theoretical framework proposed by Henri Lefebvre in his 1974 work *The Production of Space*.

"Could space be nothing more than the passive locus of social relations?" Henri Lefebvre poses this question and does not equivocate in providing a response: "The answer must be no," (Lefebvre, 1974 [1991], p. 18). In his framework, Lefebvre rejects the notion that space exists "in itself" as inert, an empty vessel that contains people, objects, and actions—a concept he traces back to Kant and Descartes (p. 2). Instead, he asserts that space is a social product, one that is socially produced as both a *work* and a *product*. Rather than reduce space to a "simple object" (p. 73), this conception of space is complex and multifaceted and presents space as more than an aggregate of mental conceptions and physical sensations (p. 27).

Lefebvre abandons any ideas of pre-existing space. To borrow a phrase from Nigel Thrift, that is, "space in which things are passively embedded, like flies trapped in a web of coordinates," (Thrift, 2003, p. 86). Instead, space is relational, and the outcome of continual construction and reconstruction. This line of thinking opens space to a wide variety of formulations, which thinkers have employed to discuss a range of different types of spaces.

An example Thrift uses to explain this manner of envisioning space is the space of measurement. This space is constructed by the standardized systems of empirical dimensions used to describe the world. It includes the simple inches and meters used to

measure the size of a room, but also the complex calculations GPS and GIS systems use to track international shipping and guide ICBMs. These tools, and the way they allow us to see the world, do not exist *a proiri*. Instead, they are the result of a historical process that includes human agency, technological innovation, and in some cases, impositions through force (Thrift, 2003). They have changed over time, and will continue to do so—as will the ways we make sense of the world through them.

A more grounded example of produced space within a city is discussed by Eizenberg in her analysis of Manhattan's community gardens. Eizenberg positions the gardens as an urban commons that resists dominant neoliberal privatization schemes. Working with the physical structure of the city, residents help produce the space of the gardens through community collaboration, aesthetic expressions of cultural pride, and various non-commodified activities like festivals. In this way, the space of the gardens push back against capitalist development. In such an analysis, the community gardens are constructed as "counter hegemonic spaces," through their physical materiality and the practices they sustain (Eizenberg, 2012).

A related type of space is outlined by Milgrom in his analysis of the work of Belgian architect Lucien Kroll. Milgrom demonstrates how the Situationists influenced Kroll's work designing a student housing complex for L'Universitk Catholique de Louvain. Drawing on concepts of "drift" (*derive*) and play, Kroll based his design process around the everyday lives of residents. In doing so the building, takes "into account how future users might be involved in producing their own environments," (Milgrom, 2002, p. 92). The result was a building aimed "toward an image compatible with the idea of self-management, an urban texture with all its contradictions, its chance events, and its integration of activities," (Milgrom, 2002, p. 89). Milgrom argues that in attempting abandon traditional hierarchies between designers and users, Kroll's works toward producing what Lefebvre would call "differential space," (Milgrom, 2002).

In contrast to these spaces, the anthropologist Marc Augé describes another type of space: the non-place. An element of "supermodernity," non-place is a space characterized by "solitary contractuality," (Augé, 2008, p. 94). In these spaces, individuals do not engage with each other but with instructional texts (e.g. road signs, advertisements, tourist maps) that dictate how to interact with the surroundings. Passing

through these spaces, each person loses their unique identity to become a undistinguished passenger or customer. However, in navigating the space they remain completely alone. This space includes many unavoidable locations in everyday life, from highways and supermarkets, to airports and waiting rooms. As with the examples above, non-places are produced both through their built environment and the way people relate the that environment.

These few examples do not constitute an exhaustive list of the types of space. However, they are illustrative of the range of qualities space can take on. A produced space like Manhattan's community gardens can welcome diversity of action and open new political possibilities, while a non-place can induce passivity and host a narrower array of practices.

Lefebvre's Spatial Triad

Given that space is produced, various conditions and contexts produce different types of spaces. Lefebvre's spatial triad provides a unitary framework through which this process can be understood. Using it, it is possible to more accurately describe what type of is produced by a given set of conditions. In fact, both Eizenberg and Milgrom make use of the spatial triad in the analyses mentioned above. The following section will provide a more in-depth explication of the framework.

Lefebvre's theory consists of a triad of *moments* which overlap and interact in a triple dialectic, or trialectic. They are as follows:

> *Representations of space.* Also described as *conceived space*, is space as understood in a "rational" or "technocratic" sense by architects, planners, scientists, and other authorities or social engineers (p. 38). This is generally the dominant form of space, and the abstract mental conceptions it produces are used to order space at the level of discourse (Schmid, 2008, p. 36).

> *Spatial practice.* Alternately called *perceived space*, is closely related to the physical aspects of space and the production and reproduction of routines and

relations that it allows or encourages. In other words, the "spatial practice of a society secretes that society's space; it propounds and presupposes it," (Lefebvre, 1974 [1991], p. 38). This includes the networks of interactions and activities which emerge from everyday life (Schmid, 2008, p. 36).

Representational spaces. Also called *space of representation*, or *lived space*. This corresponds to how space is experienced by actual users, and is closely related to the thoughts, feelings, and symbols which are used to understand space. Importantly, it is also the space of imagination, where user's desires can appropriate and change space from the conceptions enforced through the dominant conceived space.

While the spatial triad recalls the dialectical formulations of Hegel and Marx as its antecedents, it differs significantly in that it tries to move beyond binary oppositions (Lefebvre, 1974 [1991], p. 39). While the three moments interact—in fact, Schmid points out each may only be grasped in relation to one another—there is no hierarchy (2008, p. 32). The spatial triad is emphatically not a thesis and antithesis that resolve into a synthesis; instead, it is a three-way process that requires a "more fluid, rhythmic understanding," (Elden, 2001, p. 812). For instance, one should not understand lived space as being the result or resolution of interaction between conceived and perceived space. Rather, each moment "assumes equal importance, and each takes up a similar position in relation to the others," (Schmidt, 2008, p. 33).

As such, the various elements of the spatial triad are purposefully elusive and evade any attempts to apply strict taxonomies or boundaries—they exist "in a state of uncertainty," (Schmid, 2008, p. 29). Lefebvre goes as far as to say that reducing the triad to a strict abstract model would diminish its effectiveness (Lefebvre, 1974 [1991], p. 40). As such, commenters have observed that Lefebvre's discussion of space is much more effective as an "ontological intervention" rather than an epistemological one, as it provides little explicit direction on how to connect elements of specific spaces to each moment (Pierce and Martin, 2015, p. 1285). Even Edward Soja, often regarded as Lefebvre's champion in the Anglophone world, concedes Lefebvre's explication of the triad can be "perplexing."

However, despite the overall polysemy of the triad in theory, its usefulness becomes apparent when applied to specific cases. As Lefebvre states, "just as white light, though uniform in appearance, may be broken down into a spectrum, space likewise decomposes when subjected to analysis," (Lefebvre, 1974 [1991], p. 352). Hence, subjecting a specific space to analysis under the triad will generate more than a mere description of the objects or actions contained within an area, but also an account of space as a complex whole and insight into how the space was produced.

Using this framework is advantageous because of its ecumenical character. Lefebvre is skeptical of the tendency for academic and professional disciplines to divide the world into mutually exclusive domains of understanding. In developing the spatial code of the triad, he allows the analysis of space to be a carried out through a number of different lenses to "recapture the unity of dissociated elements," (Lefebvre, 1974 [1991], p. 64). Thus, the triad allows an analysis to incorporate various scales and disciplines ranging from media criticism and local history to urban planning and economics. Therefore, a well-executed spatial analysis:

> would thus bring together levels and terms which are isolated by existing spatial practice and by the ideologies underpinning it: the 'micro' or architectural level and the 'macro' level currently treated as the province of urbanists, politicians and planners; the everyday realm and the urban realm; inside and outside; work and non-work (festival); the durable and the ephemeral; and so forth. (p. 64)

As a goal of this project is to synthesize an understanding of space that acknowledges the influence of a variety of factors—from macro-scale processes to more intimate personal histories—a framework that explicitly sets out to unite these scales provides an excellent platform for analysis.

Abstract Space and London's Housing Market

Importantly for the purposes of this research, Lefebvre's spatial triad situates the object of its analysis of a broader social and economic context. This is explicitly stated within the text of *The Production of Space*:

It is reasonable to assume that spatial practice, representations of space and representational spaces contribute in different ways to the production of space according to their qualities and attributes, according to the society or mode of production in question, and according to the historical period (Lefebvre, 1974 [1991], p. 46).

Space is considered as a social product, and "every mode of production with its subvariants… produces a space, its own space," (Lefebvre, 1974 [1991], p. 31). In this sense, space can be understood as a concrete abstraction, a "symptom of a larger social whole and related… to the social, economic, political, and cultural contexts of its appearance," (Stanek, 2008, p. 67).

Thus, the spatial triad is an ideal framework for analyzing the space produced by commercial co-living in relation to the specific economic mode in which it is inscribed. In the case of Old Oak, the economic context can be understood broadly as London's housing market. And, as discussed in previous sections, this market is currently undergoing a crisis perpetuated by a system where exchange value is emphasized over use value (Minton, 2017).

In considering these specific circumstances, it is useful to introduce a type of space that is consistently produced by this economic context: abstract space. In Lefebvre's ontology, this space roughly corresponds to abstract labor. It is space alienated from the everyday users who produce it through lived experience. It is "formal and quantitative, it erases distinctions, as much those which derive from nature and (historical) time as those which originate in the body," (Lefebvre, 1974 [1991], p. 49). Abstract space can be understood as the space of capitalism, produced when the conceived space of capital becomes dominant, and thus compliant to the needs of power and the market. It is homogenous and fragmented—homogeneous in that peculiarities are effaced so that it is infinitely exchangeable; fragmented in that it is consumable in discrete parcels.

It is possible to trace how the market is already producing this space throughout the capital city. The concrete evidence can be seen in London's changing skyline. In the City, high-rise developments are being built, with hundreds currently under construction

or in the planning stages. While most of these towers feature residential apartments, only a vanishingly small number of units will be affordable or public housing (Atkinson, 2017). A large percentage of the luxury apartments in these towers are bought primarily as investments, as evidenced by the high rates under-occupancy, with 39% of units worth £1 to 5 million, and 64% of units worth more than £5 million remaining empty (Atkinson, 2018).

Atkinson describes these towers as "necrotecture," "dead spaces and dwellings, their lifelessness important for the realisation of maximum exchange value, " the result of "local government working with developers rather than building to satisfy the need for real homes," (Atkinson, 2018). This description casts these new buildings populating the skyline, their "glass and stone, concrete and steel, angles and curves," as near paragons of abstract space, (Lefebvre, 1974 [1991], p. 49). While the abstract space of necrotecture is not the only possible outcome of London's economic climate, this parallel does demonstrates how the economic conditions of the housing market do produce specific types of spaces.

As one of the goals of this project is to understand the space produced by Old Oak in relation to London's housing market, Lefebvre's framework is an apt means for exploring this relationship. Given the context in question. Examining the moments of the triad—the conceived, perceived, and lived space—allows for understanding the space as a complex whole, while tracing the appearances of abstract space helps flesh out the space in relation to London's dominant mode of production.

Context:
financialization of London's housing market
rising wealth inequality
and capital accumulation
neoliberal atomisation

SPACE
(The Collective Old Oak)

"(social) space is (socially) produced"

Conceived Space
(Representations of Space)

Perceived Space
(Spatial Practices)

Lived Space
(Spaces of Representation)

space constructed by assorted professionals and technocrats: images that help define space; emerge at the level of discourse (descriptions, definitions, theories of space); maps, plans, information from architecture and planning

the world as it is experienced by human beings in the practices of everyday life; felt more than thought; essentially qualitative, fluid and dynamic

the material dimension of social activity and interaction; the system that results from articulation of elements and activities; practices that "secrete" society's space; networks of interaction that arise in everyday life

How was the building designed?

What existing structures were used as guides?

What rules are put in place by management?

How is the facility described 'on paper'?

What are the goals of the building's owners and designers?

Do people feel like the building is 'home'?

How do people experience the community?

How do residents feel about the view from their window?

In what ways do residents interact in public space?

How do residents understand their identity living here?

Where do people gather?

What routines take place within and around the facility?

Do people stay for a long time or move out quickly?

What are the rhythms of the building's use?
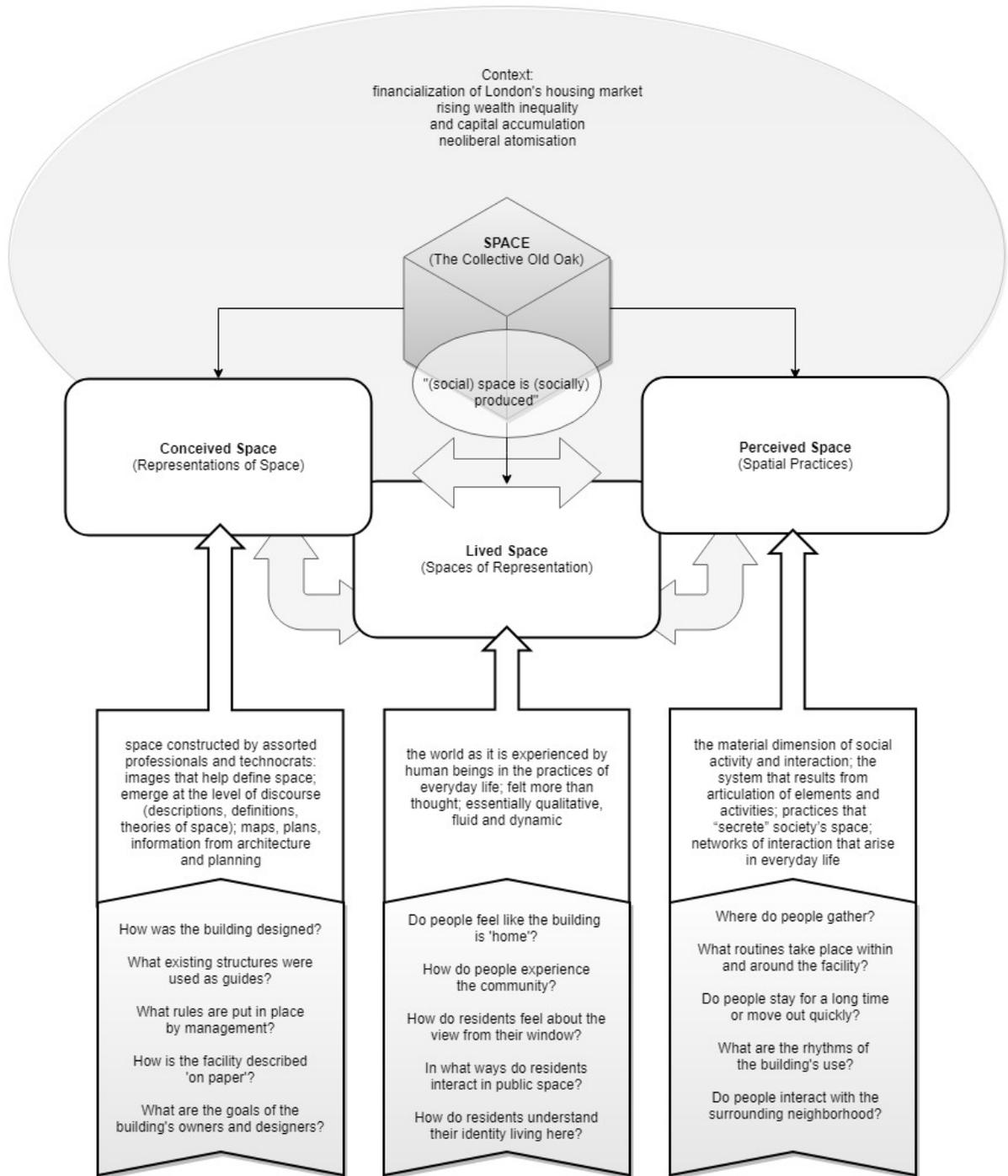
Do people interact with the surrounding neighborhood?

Figure 1. Conceptual model for the production of space at Old Oak

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Representations of Old Oak

The first encounter most have with Old Oak is not with the physical building itself, but rather with the concept of Old Oak as it is presented in various media. This includes both independent press coverage, promotional material produced by The Collective, and eventually, publicly available social media content produced by residents. Most residents interviewed report first reading about the facility through online news coverage passed along by friends or discovered through posts on social media. At least one interviewee reported that her first encounter with Old Oak came from a promotional flyer posted at Old Street Station, a major transportation hub in London's Islington borough. All participants discussed doing cursory to extensive internet research as part of their decision-making process.

These types of material are important for how they help produce the space of Old Oak through projecting a representation of its space. Such representations offer insight into the ideologies and intentions of the facility's designers, owners, and managers. Crucially, these representations are also interpreted and refracted through the prism of various media outlets, each imparting their own residual shade and perspective. These, too, are representations of space as they help actively produce an understanding of Old Oak. All these various media constructions shape the space in two distinct ways. First, they provide heuristics through which individuals understand Old Oak and co-living: what it is, why it is desirable or insufficient, and how it should be interacted with. Second, through attracting and repulsing various audiences, these representations help influence who seeks out co-living as a residential practice.

Reza Merchant, the founder and CEO of The Collective, does not shy away from media attention. He and his staff have provided a number of interviews and a substantial degree of press access to various publications. These range from personal profiles about lifestyle and business decisions to promotional pitches where they directly discuss the goals and vision of Old Oak and The Collective. In these publications, Old Oak is presented in a variety of ways, though there are some consistent themes which are stressed and reiterated: Old Oak as a solution; Old Oak as a service; and Old Oak as a product.

Old Oak as a Solution

On the eve of Old Oak's opening in May 2016, Merchant described the venture to *The Guardian*, in an article titled, "Tiny and £1,100 a month: the corporate answer to flatsharing in London":

> *Our Old Oak development is offering Londoners a fresh and innovative way of living—it's also a much-needed option in the context of the capital's housing crisis … We are changing the way people can choose to live. We're offering a solution that will enable young working Londoners, who are the lifeblood of the UK economy, to live properly, enjoy themselves and meet like-minded people* (Brignall, 2016)

Here Merchant positions co-living as a bold solution to London's housing crisis, solving the problem on two fronts: offering both affordable spaces for Londoners struggling to find accommodation, while also providing a community to assuage the alienation that results from housing insecurity. Importantly, co-living is discussed as a solution for individual renters, but also as something that meets the needs of London's economy, which relies on a steady stream of young workers to continue its growth. These sentiments are reiterated by Ed Thomas, The Collective's Head of Community Experience:

> *It is extremely difficult to find a place to rent in London and young people are increasingly marginalised … It is very time-consuming, and even once you move into somewhere, the chances that you find a group of people that you get along with are extremely slim. We're trying to tackle that problem* (The Nation, 2017)

This framing is frequently reiterated in the accompanying articles covering Old Oak, which consistently frame the development as a response to London's housing crisis. The following headlines show a range of variations on this theme:

"'Co-living' Project Takes on London Housing Crisis"

Each individual news item falls somewhere on a spectrum between optimistic and skeptical about The Collective's ability to actually address the problems it purportedly sets out to solve. However, setting aside the assorted value judgements, this type of media representation constructs Old Oak as inherently entangled with the current economic conditions of London. It is both a novel response to market conditions and a bellwether; it is cutting-edge and experimental but may indicate a possible standard for the future of the city. In this way it exists as a contradiction: it is the result of an overly financialized market, but also a solution to the very problem (Harvey, 2014). Or, as Merchant explains in *Fast Company*:

> *There is a massive issue in big cities like London, San Francisco and New York where the lifeblood of these economies simply cannot afford to live properly … When you have such an acute issue for what is such a key part of the economy, the market will inevitably come up with solutions* (Peters, 2015)

Co-Living as a Service

Given that The Collective presents Old Oak and co-living as a possible solution for young people seeking housing in a difficult climate, it is also important to understand how that solution is meant to operate. The solution that The Collective offers is housing as a service, a service based on convenience and fluidity.

This view has been articulated on several occasions. Speaking at Tech Open Air, a technology festival in Berlin, The Collective's chief operating officer, James Scott, stated:

> *As we decouple the function of living from the physical location, we need to help positively curate more communities. Eventually, we will move to a model of subscription homes or providing living as a service* (Mairs, 2016)

A similar imagining of Old Oak is expressed by Merchant in an interview with Life Edited. In this statement he uses an analogy comparing a co-living with the media-streaming service Netflix and the ride-hailing app Uber:

> *Also, we are 'tech junkies' and have grown to expect everything as a service. Netflix, Uber, the list goes on, and The Collective offers living as a service. We don't have time to, nor want to, worry about life admin* (Friedlander, 2015)

This conception of co-living stresses a new way of thinking about the relationship between an individual and housing. In this paradigm, ownership and long-term engagement with a residential situation are downplayed in favor of ease of access and lack of commitment. Just as a Netflix subscription provides temporary access to a digital archive of films for a monthly fee, the ideal model of co-living as conceived by The Collective provides temporary access to shelter and community. Just as a Netflix subscriber is not expected to desire ownership of a physical copy of a specific film, an Old Oak resident is likewise assumed to be uninterested in physical ownership of residential property. Underscoring this idea in his talk given at Tech Open Air, Scott declares, "in the future we will all be homeless," (Mairs, 2016).

This sentiment is again reflected in the way The Collective emphasizes convenience, which is central to Old Oak's operations. Once more, Merchant draws on the language of startups to describe his company's operations:

> *The way in which we consume now is very much on-demand. If you think of companies like Uber, everything is instant and convenient … Once you sign a contract [with The Collective] everything is in place so you can just start living there. That convenience factor is really important, and I think the sense of*

community it provides is important too. People value experience over material things so much more (Temkin, 2016)

Merchant restates this idea speaking in *Deezen*, an online publication dedicated to architecture and design, "Having a mortgage is a big commitment. Why have that worry when you have a super convenient offering that caters to all of your needs that doesn't commit you for a long period of time," (Mairs, 2017). At least in part, "catering to all of your needs," refers to Old Oak's considerable amenities, which make it possible to move in to and live in the facility with very little personal property. Or, as Merchant says, "in theory, you wouldn't have to leave the building if you didn't want to, because you have everything at your fingertips," (Mairs, 2017). In practice this refers to the self-contained disposition of Old Oak—that is, the fact it contains a grocery store, gym, and bar—but also the items provided to residents like laundry facilities, cookware, and bed linen. These features are highlighted as important elements of Old Oak, as their provision allows new residents to come and go with ease, seamlessly transitioning from resident to non-resident and vice versa.

This idea—housing as a service—is particularly important in the way it relates to The Collective's idea of the co-living community. Here, the lack of commitment—the convenience of coming and going at will, the disincentive to accumulate possessions—means the community of Old Oak is conceived of as very fluid. In an interview with *Financial Times*, Merchant says he expects the average resident to stay from nine to twelve months, "this is a transitional product—it's not somewhere you're going to live for the rest of your life," (Davies, 2015). This assumption is reflected in the leases offered by The Collective, which codify this timeframe. Elsewhere Merchant talks about how the target demographic for Old Oak is young millennials who value flexibility, those who are not expecting to stay in the same job or city for long (Mairs, 2016). Scott cites the concept of "suspended adulthood," and the subsequent transient lifestyle it engenders, as a market driver for co-living, as "the rise of the digital nomad results in an increase in mobility and a reduced desire to settle," (Mairs, 2016).

These statements make it clear that Old Oak has been designed to accommodate individuals who do not plan on staying for the long-term. An article in *Forbes* demonstrates that this has become true in practice as well, citing a 50% annual turnover

rate (Smith, 2018). This courting and enabling of transient residents demonstrates The Collective's plan for living as a service calls for a fluid community, where convenient "onboarding" and "offboarding" of individuals happens continuously.

This dovetails nicely with Old Oak's conception of its community as part of its product. As Lefebvre points out, exchangeability implies interchangeability (Lefebvre, 1974 [1991], p. 341). This idea of a community consisting of fungible individuals—each leaving and being replaced in turn—enhances Old Oak's ability to function as abstract space, an exchangeable commodity, which, as the next section shows, is inherent to its design.

Old Oak the Product

Finally, a third way Old Oak is represented in the media is as a product. This is most explicit in the real estate and business press, though the framing is also visible in other publications.

In describing the design process behind Old Oak, Scott states, "what we've done is rip up the rulebook, and say, 'If you've got a blank piece of land, and economy of scale, what would be the perfect co-living product?'" (Taka, 2016). Likewise, in an interviews Merchant uses parallel wording, stating, "Old Oak is our first new build and the first true embodiment of our Shared Living product [sic]," and "It's a product that caters to the changing lifestyle trends of a demographic which more and more values experiences over material possessions," (Friedlander, 2016; Plentific, 2016). These statements plainly indicate that the operators of Old Oak understand the co-living facility as a commodity, one that is defined by a business-customer relationship between the company and the residents. Highlighting this way of thinking are Merchant's comments when asked which businesses he admires:

> *You know, let's just look at someone like Apple. They've transformed people's lives, they've transformed the way people use technology, interact with technology, by just creating really high-quality products and it's in the intricacies and the detail. You could say the MacBook is just a laptop, anyone can make a laptop, but there's so much thought that goes into it that makes it impossible to*

recreate. In the same way, we spent years designing The Collective Old Oak with the end-user in mind. (Wonderland Magazine, 2017)

This comparison between The Collective's co-living facility and the high-end consumer electronics of Apple is apt, if one conceives of Old Oak as a product designed to generate income on the market. Statements like these imply that The Collective understands this to be the case. However, conceiving of Old Oak as a product goes beyond its relationship with consumers. Old Oak is also represented as a product for investors, and its existence as such is also an important facet of its production.

There is a wealth of media that covers co-living sites in general, and Old Oak specifically, from the perspective of its status as a financial asset. A representative example comes from Reuters, which published an article titled "Microflats attract investor cash as millennials embrace co-living," with the lede:

> *Millennials priced out of London's traditional housing market are opting to rent tiny apartments in so-called "co-living" developments, a fast-growing area that private investors and venture capital are eager to tap into* (Vaish, 2017)

Another example of this angle comes from *The Wall Street Journal*, which provides a complementary analysis in an article titled "Venture Capital's Answer to High-Priced Housing: Dorms for Grown Ups," (Brown and Kusisto, 2016). Similarly, in an article covering Old Oak, *The Economist* quotes several investment experts on the potential growth in the sector, and notes that "financial models predict that co-living will substantially outperform conventional rented flats in future because the return per square foot is so high" (*The Economist*, 2017).

Much of the coverage of co-living as an investment vehicle looks toward Old Oak as a case study, tracking The Collective's progress and value as a litmus test for the viability of the sector as a whole (Vaish, 2017). Articles pay close attention to The Collective's ongoing fundraising efforts and plans for expansion—for example, a *Forbes* report titled "Exclusive: Britain's Co-Living King Has Raised $400m To Take On WeWork In America," touts The Collective's fundraising success and speculates about the future with quotes from investment consultants rounding out the analysis (Smith, 2018).

Along related lines are the abundance of publications covering the value and exchange of the Old Oak property, which was put on sale in 2017 (Horti, 2017). In an article with *Property Week*, Merchant describes the reasoning behind the move as rooted in bolstering future investment:

> *Given that Old Oak is now fully let and the co-living business model has been proven, we feel it is the right time to assess investor appetite and prove out the strength of the investment market for this emerging asset class. This will enable further growth in our sector and support our expansion plans of delivering 20,000 co-living units globally over the next five-seven years* (Horti, 2017)

The sale of the building is seen by many as a test of co-living's viability, not as a housing scheme for those using it as a residence, but as a measure of the model's worth as an asset (Peace, 2017). As of April 2018, the inability of Old Oak to accrue the desired market value is seen as potentially damaging the future of co-living in general (Partington, 2018). However, articles covering the sale still assert confidence in the sector as means to spatially fix and accumulate capital, stating, "an investment product like this will be well sought after by a wall of global institutional capital looking for income and long-term investment assets," (Partington, 2018).

This type of coverage is not unusual—in fact, financial journalism and related press coverage is deeply entwined with the real estate market (Walker, 2014). This type of media representation provides insights into how co-living ventures are conceived of by the people who own and manage them. In this case, it is clear that Old Oak is understood to be both a product being sold to consumers on one hand but also as a financial instrument being sold to investors on the other.

Importantly, these types of discussions reveal the deep connection between how space is produced in conjunction with the dominant mode of production. As these representations show, capitalism has made the production of abstract space, exchangeable space like commercial co-living, an integral part of accumulation. Developments like Old Oak are "no longer the auxiliary and backward branch of

industrial and financial capitalism… instead it has a leading role," (Lefebvre, 1974 [1991], p. 335).

Reflecting on Representations of Space

These representations of space are important to examine, because, as Lefebvre makes clear, they are often the dominant form of space and have an outsized influence in the production of space; "we may be sure that representations of space have a practical impact, that they intervene in and modify spatial textures which are informed by effective knowledge and ideology," (Lefebvre, 1974 [1991], p. 42). In examining these representations it is possible to see more clearly how they collide, interfere and interpenetrate other aspects of space (Lefebvre, 1974 [1991], p. 87). It is possible to tease out how these representations of Old Oak—as a solution, a service, and a product—shade residents' perceptions and understandings of the co-living facility.

A Solution

In interviews, residents demonstrate that they are acutely aware of how co-living is positioned as a solution to current problems in London's housing market. The degree to which this framing is accepted or rejected varies, though there is consistency in one respect: claims about co-living's affordability are difficult to reconcile with the actual cost of living in Old Oak. As one resident explains:

> *It's interesting. We always used to say, you're solving the housing crisis? Not really. As I said, if it was cheaper then I think maybe it could. I say maybe the concept could potentially solve the housing crisis, but you've not really made it affordable.*

This evaluation is backed up by other residents, many of whom are quick to point out that the facility is "not particularly cheap." However, while residents remain skeptical to this instance of co-living being characterized as affordable, some do concur that Old Oak's co-living arrangement could be a practical solution for those who can afford it—if they practice a specific form of transient lifestyle:

This notion of what they were trying to achieve at The Collective... was a little bit PR marketing, you know? The fact they were trying to end the housing crisis with people 380 pounds a week was a little bit... I really wish they didn't go down that route, it is kind of offensive. There's people sharing a room and paying a hundred pounds a month. You know? You're not ending homelessness... This is a millennial nomadic thing.

"Marge," another former resident, makes a complementary point. Having also first dismissed the idea that Old Oak is actually a solution to the decreasing availability of affordable housing in London, she points out that it is a very practical housing solution for a certain demographic, namely, young professionals transitioning to life in the city:

Yeah, it was a bit overpriced… Like is it really, you know, value for money? So I think it's good if you've just moved to London, you don't know anyone, you know, you're in your twenties and it's a good place to stay for like a few months or a year where you get your bearings, meet some people make some friends

Statements like these are interesting to read in the context of The Collective's assertion that co-living is a solution for both individuals and for the needs of the economy as a whole. Specifically, they seem to show that Old Oak does seem to be more effective as the latter: it may not be especially affordable, but it does allow for a stream of younger, transient labor more streamlined access to the London job market.

A Service

In interviews, statements akin to those in the previous section were common. Many respondents identified with The Collective's concept of living as a service, and recognized that convenience and fluidity were inherent to Old Oak's operations. When asked about their decision to live at Old Oak, respondents cited the ease of moving in and the pre-existing social life co-living offers as majors contributors to their decision to try this model of residential life. Former residents also noted the consolidation of multiple bills into one and the inclusion of a cleaning service as key pull factors in choosing to

reside at Old Oak. One former resident seemed to completely agree with Merchant and Scott, stating "people want convenience:"

> *People are paying for convenience and they're paying for the social aspect as well. Because the people who have just a lot of people who are young or they've just arrived in London. So you know, think if you wanted to have a mortgage or if that was important to you, you wouldn't be moving into The Collective.*

Highlighting how this idea is manifested in practice, two different respondents recounted an incredibly quick transition process, going from becoming aware of the facility to being a resident in just a matter of days. Another former resident, "Jeffery," notes that the transient nature of the community was very palpable—speculating on the average tenure, he reports feeling as if most residents only stayed between four and six months. This estimation seemed to be confirmed by short conversations with residents around the facility; many reported on planning to stay at Old Oak for only several months with one describing his tenure as "really just passing through."

Understanding Old Oak as a transient space that can be tapped in and out of like a streaming service seems to be widely understood, and this understanding is reflected in practice. However, how this concept relates to community still appears to be a point of negotiation. "Jozien," who lived at Old Oak for twelve months, discusses how the high level of turn over sometimes felt at odds with her concept of community:

> *I think a lot of people didn't want it to be transient. But I think that was kind of one of the things that was a bit of a push-pull with it. Because it was sold on a lot of values of sort of not being attached to possessions and that being magic for them on the same levels of selling the values of community and togetherness… And you can't really have both those things*

From these testimonies, it appears that many residents share an understanding of "living as a service," and use it as a model for how to interact with the space. However, the ways which convenience is meant to penetrate daily life is contested as well. "Evan," an early resident, notes observing many fellow residents easily integrating into a low-friction

lifestyle, where many domestic details were taken care of, allowing them to focus on work. However, "Julia," a former community manager, describes that the range of expectations residents had about living as a service was surprising. While many residents were self-reliant, some felt The Collective should be more involved in handling daily details:

> *And I think, maybe there's a section of people who are drawn to Old Oak because they think, 'Oh, service living, you know, somebody who does my laundry every time. Or who cleans my room. Or like brings my food up to the, to the door…And then there was this girl at some point that complained that we were supposed to 'live for you.' It's like we take care of the living. And, I was like how am I supposed to live for you?*

This ambiguity surrounding how services and responsibilities are allocated between residents and The Collective is a reoccurring point of tension which will be discussed in more depth in later sections.

Product

The image of Old Oak as an asset in an investment portfolio is never far from the minds of the residents. In interviews, residents are nearly unanimous in articulating an understanding that Old Oak—the building, the services provided therein, and the community built around it—has been carefully constructed to generate profit. Former resident "Marge" describes Old Oak with the pithy phrase, "it's sort of this money-making machine."

"Jeffery," another former resident, describes how even as he appreciated the community and social life at Old Oak, he always understood it to be part of a product:

> *So my view is it was a little bit of branding and they sold it hard. My view is they, they did very well in the community in some respects... but The Collective was a space with bricks and mortar and it was a company that needed to turn a profit to exist*

The profit motive, and the transactional basis of the community, is also noted by "Evan," one of Old Oak's first residents:

> *Yeah, it's a, it's a business and it's an expensive business. You need a lot of money to get it all up and running. And it's not like, you know, doing a hippie commune somewhere in the countryside where you get like 30 people together and say, "Well we're all about love and peace" and I'm like, no, this is just providing a service where they see a market for it*

These understandings of co-living as a business and Old Oak as a product help regulate how residents interact with the management and with each other, thus playing a part in how the social space is produced. In assessing whether their experience with co-living was positive or negative, respondents often position themselves as consumers and rely on the language of the market and exchange to articulate their evaluation. For example, this framing is visible in complaints about day-to-day living conditions like over-sensitive fire alarms and frequently out-of-service elevators:

> *Um, they were just saying like, you know, and that's why people get so upset if the elevators are down on the fire alarm. Yeah, I pay so much money. I don't want to fire alarm going off at 2:00 in the morning*

This consumer mindset permeates the social space of Old Oak, contributing to expectations about how the community should function. One way this plays out is in expectations about access to communal spaces, such as the kitchens. While each floor has its own communal kitchen, the top three floors house more expensive premium rooms and fewer people. The communal kitchens on these floors are themed, better stocked, and generally seen as more desirable. While theoretically open to all, their use by people residing on the lower floors became a point of conflict:

> *I mean is it territorial? Like you just want to go and cook at the end of the day and you expect to have use of the kitchen. It's like, because they have such a shit system, people have to come and use yours. Your kitchen is always busy, busier than it should be. I don't think that's being territorial. It's just being pissed off at*

the inconvenience of paying all that money and then, you know, not having space to cook. I think it is fair enough.

Other residents take a more lighthearted perspective on the social divisions that arise from the ranked consumer classes within Old Oak. "Evan" draws comparisons to the satirical sci-fi film *High Rise*—an analogy that comes up quite frequently. Based on the J.G. Ballard novel of the same name, the film chronicles life inside an all-inclusive residential tower outside of London as it deteriorates into chaos and violence between classes. According to Evan:

> *It was like floor eight, nine and ten. They were half the size of the other floors and course had a better view. So we're sometimes joking with the riff-raff from downstairs and were like, "We should get like a private elevator so on the way up and we're not dealing with you. Why do you come to our communal kitchen?"*

Assessing Old Oak in terms of monetary value, using the facility as temporary and transitional housing, and understanding the community as a product and a service: these are recurring themes in conversations with residents and former residents. The degree to which they show agreement with, or at least awareness of, the way Old Oak has been imagined by planners and social engineers is significant. The congruence suggests that the conceived space of Old Oak, and the design features built to facilitate that space, do have considerable influence on the production of social space at the facility. However, it is not completely dominant. In the next section, the tensions within the spatial triad will be explored in more detail as the facility is analyzed moment by moment.

Approaching Old Oak

It's a very desolate area. There's like nothing there.

The Collective Old Oak is located between Harlesden and North Acton on the outer periphery of western Zone 2. This location is a fitting location if Old Oak is understood in relation to abstract space. As Lefebvre describes, the production of space as a commodity fractures space, rendering it artificially scarce anywhere near a centre so as

to increase its value, "This is the way in which space in practice becomes the medium of segregations, of the component elements of society as they are thrust out towards peripheral zones," (Lefebvre, 1974 [1991], p. 334).

For the facility's 500-plus residents, a trip home from a central London neighborhood such as Covent Garden starts with 45 minutes on the tube and ends with a 15-minute walk from either North Acton or Willesden Junction stations. The last leg of the journey follows a road heavy with lorry traffic as it slopes past the low-slung brick railway cottages and fenced-off industrial parks which characterize the area. With its lucent glass cladding cutting a sharp silhouette, Old Oak stands out as an unusually sleek object, seemingly at odds with the lived-in landscape.

"At the moment, you'll see when you go: It's a very desolate area. There's like nothing there. Yeah, it's a kind of grim," describes Marge. In describing the walk from the station to the tower, she adds, "[my friend], she called it running the gauntlet, like going to the station and back. But I didn't feel it was that bad."

A resigned ambivalence toward the neighborhood is common among residents at Old Oak, most of whom keep their interaction with the surrounding area to a minimum. Residents cite the lack of appealing amenities and fear of crime or street harassment as major factors for their cloistered behavior. One former resident told of being assaulted en route to the tube, noting that others had similar negative experiences. According to "Roland," a former resident, "the neighborhood is quite bleak, quite commercialized, quite industrial. You would just walk straight from the tube station to the Collective. And that was about it."

This disaffiliation from the world immediately outside Old Oak is consistent with The Collective's desire to have the facility completely self-sustained, offering residents "everything at their fingertips," (Mairs, 2016). The opening of the SimplyFresh grocery store on Old Oak's ground floor further encouraged a hermetic lifestyle among residents: "It was completely self-sufficient, really. You didn't have to connect with the neighborhood… I guess some people walked off and used the local businesses. It wasn't really done much." Those that did "walk off" do find local businesses to enjoy—especially small coffee shops and bars in nearby Harlesden. However, as a resident points out,

hinting at a class divide that may segregate residents from the surrounding community, "But you know, the people are like too middle-class to notice them."

The spatial practices evoked in these assessments recall the process of insulation, as described by Atkinson, in which groups seek "relative immunity from the negative externalities of such problems as crime, disorder and antisocial behavior," through banding together to create "a sense of refuge," (Atkinson, 2006, p. 822). Watt draws from Bourdieu to expand on this concept, adding that this flocking is also motivated by matters of taste: people seek to interact with areas that conform to their class preferences while feeling repulsed by areas which do not, thus creating a spatial expression of a collective taste for certain locales," (Watt, 2009, p. 2876). These "spatial divisions of consumption," are demonstrated in Old Oak residents shunning of their immediate neighborhood in favor of those areas which more closely conform to their habitus—neighborhoods like Camden and Shoreditch are often cited as more desirable places to socialize. As one resident explains, "I never really sort of went out locally. There's not really a lot for me in that area."

The seemingly poor fit between Old Oak and its local environs is usually chalked up to economic and financial considerations. In interviews, people relay suspicions that the location was chosen by the developers based on the logic of real estate speculation. Evan sees the entire process as part of London's ongoing pattern of redevelopment and displacement:

> *In the beginning, I was surprised that they would open up something like that in that area, but then, later on, I thought they probably got a very good deal where they could buy the property very cheap. And in the future, I saw some plans in like five, 10 years they're going to build this... It's going to be like a hub connecting all of England. Crossrail, go to the airport. But then of course, with every big city, you have this urbanization going on. So I think in a couple of years none of the locals will be able to afford it anymore*

Indeed, long-term plans for Old Oak's neighborhood have the stated goal of transforming the area into the "Canary Wharf of the west," (Mairs, 2016). Considering that The

Collective's next high-profile project is another co-living facility in the actual Canary Wharf, it does seem that Old Oak was built in waiting of a neighborhood that does not yet exist.

This observation speaks to a reality that Old Oak residents understand; that the entire spatial context of Old Oak is enmeshed in an economic process. Their home, and the neighborhood it is embedded in, is enframed by the needs of capital. These thoughts resonate with the words of Lefebvre:

> *[Space's] potential for being occupied, filled, peopled and transformed from top to bottom is continually on the increase: the prospect, in short, is of a space being produced whose nature is nothing more than raw materials suffering gradual destruction by the techniques of production* (Lefebvre, 1974 [1991], p. 335)

Entering Old Oak

This will be part of what I have when I pay for it? This is fucking awesome!

Visitors and residents stepping through the keycard-controlled automatic doors of Old Oak's main entrance are greeted by a lightbox marquee reading: *Welcome home! The Collective Old Oak*. This is the lobby, the facility's reception area, largest communal space, and the central crossroads for foot traffic traversing the building. Walk to the right, past the communal lounge area, and you will find yourself at the entrance to The Common, Old Oak's publicly accessible bar and restaurant. To the left, there sits a bank of mailboxes and a doorway leading to a multipurpose events space. Head straight forward, and you will pass the staffed reception desk and reach a bank of elevators that lead to the residential floors.

Lounge Space

The entry space is bright and airy with high ceilings. Mies-inspired floor to ceiling windows and a level grade between the sidewalk and interior floor leave the lobby feeling spacious and open. However, as one resident notes, the in/out distinction is felt

in other ways, "Because the bus stops right outside and you've got the security there, you actually realize that as long as you can get into the building, yes, you are quite safe." Keycard regulated entry at certain hours and on-site security are meant to ensure only authorized persons have access to the site, a fragmenting of space consistent with abstract space which is "divided up into designated areas that are prohibited to one group or another," (Lefebvre, 1974 [1991], p. 319).

The room is a bit of a showpiece, often prominently featured in photo spreads of the building. Unfinished concrete columns and a ceiling snaked over with exposed utility ducts give the room an air of industrial chic, just as promised by the company's website. Muted grey walls and tiling set a demure tone while splashes of color come from the purple, and blue sofas and chairs that recall Scandinavian and mid-century design. Big leafy plants are placed around as if to soften the austerity of the space. Touches like the vintage marquee and a patterned fluorescent light installation behind the reception desk seem to anticipate being the subject of Instagram photos (Manovich, 2016). Lefebvre identifies these on-trend aesthetics and other signs of status as strategies to compensate for a peripheral location. "Their price is simply added to the real exchange value," further producing Old Oak as a commodity (Lefebvre, 1974 [1991], p. 339).

The overall aesthetic is that of a boutique hotel or third-wave coffee shop, and the way it is perceived varies. One former resident is put off by what they experienced as the room's stark and aloof feel, describing it as a "bit of a weird place to sit when you want to relax in the evening. It's like a hotel lobby. It has some sofas, there's no television. It's not cozy because it's like glass walls." However, another was thoroughly impressed, seeing the curated interior as a step-up from previous housing situations:

> *When I first walked in there and went, "Okay, this will be part of what I have when I pay for it? This is fucking awesome!" There's like a piano. And it's like massive. It just looks really cool. And this is bigger than a single place I've ever been.*

As this communal space is passed through by anybody entering or leaving the building, it unsurprisingly functions as meeting point and space for socializing. Residents speak fondly of the chance encounters and unexpected moments of conversation which take place as they exit or enter the building:

I had, it was a friend and I'm sitting in the lobby and she came in, she saw me and started crying because they're so they, "Oh it's so good to see a friendly face"

According to residents, these moments of happenstance are what make the building feel more like a community. One resident, Jeffery, called this appeal "social proximity," referring to the unforced sociability that comes from sharing a space with many others. He described an instance when he showed a friend around the facility. The friend, a property developer, initially did not understand the appeal of co-living, confused as to why a landlord would spend resources on common spaces. However, upon witnessing interactions between residents, he warmed to the idea:

And in an instant he got it. Because in his properties, no one says hello to each other. They don't even look each other in the eye. And yet here was this space where people are happy to interact, happy to say "Hello, hey, how are you? How's it going? Can I help you with that? Can I hold the door?"

These moments of interpersonal bonhomie are not the only way users appropriate the space in the common areas of the ground floor. Residents can recount points where the effusive liveliness of hundreds of people acting at home in one building became too much for the management. After all, lived space is difficult to contain—as Schmid characterizes it, "there always remains a surplus, a remainder, an inexpressible and unanalyzable but most valuable residue," (Schmid, 2008, p. 40). The lobby is adjacent to The Common, an on-site bar, and the site of the popular Friday Night Drinks event. Drunken altercations are not unheard of, and instances of intoxicated residents abusing the staff or each other occasionally arise. As a result, residents have been expelled and unsanctioned drinking has been banned in the lobby—however, residents report enforcement is highly conditional.

Still, a former employee testifies to the predictable unpredictability of residents, citing the unusual behavior captured by the facility's numerous security cameras: "And usually there was a CCTV movie of somebody drunk, you know, moving all the plants or whatever it was. But that happens, you know?" On one level, rearranging Old Oak's

potted foliage in an act of large-scale ikebana is a drunken lark. Though in its incoherence and willfulness it embodies a hallmark of lived space: the fact that it "need obey no rule of consistency or cohesiveness," (Lefebvre, 1974 [1991], p. 85). These small appropriations—poesy of everyday life, as Schmid would call it—bubble up from those dwelling at Old Oak and often subvert attempts at regulation by staff and management (Schmid, 2008).

A microcosm of this tension can be seen in the lobby's piano. Placed out in the communal space, the instrument is meant to liven the room by inviting impromptu performances. Yet, a constant stream of off-the-cuff concertos proved to be too much for the staff and the keyboard has been padlocked shut. Instead, the lobby's ambience is set by a playlist of contemporary hits—Drake, Nicki Minaj, and Ed Sheeran are piped in through speakers on the ceiling.

Around nine on a Friday night, a man wandered in red-faced and animated. He had been drinking at The Common and seeing the piano, wanted to play. Undeterred by the lock, the man approached reception. For 15 minutes he bantered with the staff, imploring them to turn off Spotify and open the keyboard. In the end, he succeeded, and his rendition of Pink Floyd's "Hey You" echoed off the concrete walls.

These prohibitions—against drinking, against piano playing—are characteristic of abstract space as discussed by Lefebvre. This domination is often expressed as "an object offered up to the gaze yet barred from any possible use," (Lefebvre, 1974 [1991], p. 319). Yet, users are still able to put these spaces to their own ends, pushing back against the abstraction of space and putting their spaces of representation to the fore.

Reception Desk

A few steps beyond the communal lounge area sits the reception desk. Here staff members oversee the room and work to keep the facility operating smoothly. Sitting behind an imposing desk and backlit by a radiant neon installation, Old Oak staff check in visitors, receive takeout deliveries, and field questions and complaints from residents calling in from the floors above. On a weekday night, two staff members are attending

the counter. They alternate between photographing each other and chatting with a Deliveroo delivery driver.

A former staff member recalls the steep learning curve employees faced when opening Old Oak, "I think with the team, we were thrown into the deep end from the start… and they're still figuring out things now after almost three years." She recounts how many specifics of how to run a large co-living facility were overlooked or unanticipated. For example, despite expecting the facility to be based around service and the logic of on-demand apps, the management had made no plans for handling the logistics of this in practice—there was not even a process for dealing with parcel deliveries, resulting in a logjam of mail-order goods around the reception area. Residents corroborate this detail: "They never thought about the fact that... all these people living here, they are probably all Amazon users... Literally, you would come home and they'll be just mountains of Amazon parcels. I think about 600 people living there and they all probably have an Amazon Prime account."

In addition to processing the flows of people and material goods entering the building, the front desk is also a site where flows of information are collected and exchanged. Visitors are recorded and logged, CCTV footage is streamed and monitored, and calls from residents fielded and followed up on. While some residents prefer to work out issues on their own, many turn to the staff as a first step. This pattern reflects the structure of Old Oak's leasing structure; residents are in contact with The Collective more than with each other. Reports of broken washing machines, faulty smoke alarms, loud neighbors, and stolen silverware all make their way to the front desk.

As the front desk is manned 24 hours a day, the staff observe the rhythms of life in the building. At each shift change, events and incidents are relayed to incoming staff, creating an unbroken chain of supervision:

> *And the night team, they're actually very interesting to speak with... because they see everything. They see the drunk people. They see, you know, the four a.m. in the morning who comes back with whom. And obviously, at 3 a.m. in the morning, lots of things happen. All kinds of socializing in the lobby.*

Even with this consistent monitoring of the reception space, complete control of the flows of people and material is unattainable. The ground floor is largely open to outsiders, and most residents feel this makes the floor a space where the public and private realms overlap. At some level, it should be treated like public space. As Shelly, a long-time resident, explains, "You've got to be a little bit more vigilant here than maybe want to be." She goes on to relate several incidents to flesh out her view. A woman had her purse stolen from the lounge area. Another resident was assaulted in the public toilets. In her estimation, the "whole floor is pretty vulnerable and to a certain extent any part of the building is." One resident recounts how, with a little confidence, anyone can bypass the reception desk and bluff their way into the residential space above. As a result, there have been several instances of uninvited guests wandering the halls and attempting to enter private rooms.

Events

To access the residential spaces above, walk beyond the reception desk and turn a corner to face Old Oak's dual elevators. Swipe your keycard to summon a lift. In the passing moment of ennui as you wait, your eyes wander to a blackboard listing the week's events in bright, colorful script. This is Old Oak's social events board, and it offers a window into the more structured side of co-living's social life.

Strategically placed at this bottleneck for foot traffic—"it's right next to the elevators and everybody sees it. You can't miss it"—the board is meant to keep residents in touch with planned social events in the building. It serves its function well, and according to a former community manager, its weekly updates were appreciated and relied on by the residents. For a week in April, it advertised an improv class on Monday, a garden club meeting on Wednesday, and a toga party on Friday, among other events and messages ("Laundry room closed this week! Sorry!" is scrawled apologetically in a corner).

These events are a core part of Old Oak's public identity; they are often mentioned prominently in promotional materials and in press coverage—"Monday is "Game of Thrones" night at The Collective's Old Oak building," is how *The Economist*, ledes a 2017 article on co-living. This image plays out in reality, as The Collective does make a concerted effort to keep the calendar full. Community managers are tasked with

organizing events as well as encouraging residents to develop and run events of their own. As one former manager puts it, "It is my job actually to encourage them. So I had a small budget that I was like, OK, what do you guys need? A case of beer? a case of beer."

The result is a fairly diverse calendar that at least partially led by the current community. For instance, one respondent discussed being moved to start a literary club while living at Old Oak. Another recalled how a particularly entrepreneurial resident started a weekly event called Beers and Ideas where residents could brainstorm and exchange project ideas over drinks. The crowd-sourced logic behind the events means, at least in part, the calendar reflects the interests and peculiarities of the population over time. As Roland, an early resident observers, there have been noticeable shifts in the composition of events, possibly linked to changing desires of the population:

> *I think when I started there it was pitched a lot to young entrepreneurs, real professionals. I felt when we were working there, there was a lot more like business connections. Like we'd set up a group called Business Cafe and meet once, twice a week off in the library… I'm mean there's still things like the Coding Club and stuff like that, but when I look at the notes board now, it seems very… that the events on the board since are very like holistic well-being. There's things like bible study.*

Here it is important to acknowledge the degree to which events are curated by management. An example of this is bible study, which, according to interviews, was pitched by residents but initially discouraged by management. After some back and forth, the event was allowed to be scheduled but with "limited advertising." Commenting on the controversy, another resident questioned the motivations behind these types of decisions:

> *And again, they had that they had a someone come in and talk about Kabbalah, which was a Collective-run event. So you're like, okay, just because it's not making money or you only allowing the kind of trendy religions in now? Or what the celebrities are into? Yeah, yeah. There's a lot of kind of inconsistency there.*

It did start to feel some of us that ran the community, stuff like that was being squeezed out a bit or being a little bit kind of more controlled depending on, on the sort of Collective branding.

In instances like these, it is possible to glimpse how life inside the building sometimes clashes with how Old Oak was imagined and represented. While the marketing team is "looking for that entrepreneur that ties in a lot of networking and flare and the next google one million dollar idea," those living in the building may be unconcerned with projecting that image. Using pressure to restrict or encourage certain types of behaviors or social milieus suggests the social engineering or nudging that Lefebvre associates with conceived space (Lefebvre, 1974 [1991], p. 38).

However, these types of conflicts don't appear to dampen many residents enthusiasm for structured socializing at Old Oak. In interviews, several respondents spoke positively about these happenings, praising them as easy ways to meet friends, do business networking, or learn new skills. Residents also appreciated the physical proximity of the events, and how simple it was to integrate them into their schedule. According to a community manager, seven or eight p.m. on a weeknight is the "golden time," where attendance spikes as residents can plan on attending after work.

Even as some residents embraced the social calendar, the enthusiasm is not uniform throughout Old Oak's population. As Marge explains, while a core group of residents are very visible in the community, "there's a lot of people who just kind of live in the shadows and don't ever participate." Roland confirms this feeling, saying "[we] all joke about this... how we reckoned at any point only 10% of the people used to come to the events. We don't even know that there's 400 people in the building."

While the Friday Night Drinks event fares better with its pull of free alcohol, other attempts to foster more socialization don't always pan out. One resident observed a recurring problem, using a Collective-sponsored bunch to illustrate a pattern:

Then you would actually see people coming down, loading the salmon and the eggs on their plate and come up to their rooms to eat it. And then we were all like, the whole point is to come down... and to make people get connected and

bond instead of just loading it up and just going back to your room and eating it
by yourself

This disjuncture between the emphasis on socializing and the actual rates of participation again shows how actual lived experiences within the building can diverge from the intended plan. A community manager acknowledged that she was very aware of this participation gap, and actively worked to narrow it. However, she also noted that at some point, the social milieu of the community was really in the hands of the residents, "I can only give them the tools."

The Residential Space
But then you discover that common sense for a lot of people, it's very different than what you consider common sense

Lifts

Having explored the ground floor, it is time to move upward into the nine floors above, which contain Old Oak's residential rooms and common spaces. At 11 storeys, the facility is no skyscraper, but remains too tall for a walk-up, thus the vast majority of traffic relies on the building's two lifts. While often overlooked, the short lift journey connecting Old Oak's publicly-accessible ground floor to its private levels is a crucial liminal space. As Garfinkel points out, elevators occupy a strange place, "public yet private, enclosing yet permeable, separate from but integral to the architectural spaces that surround them," (quoted in Graham, 2014, p. 245).

The importance of the lifts to this co-living tower is made clear by how frequently residents mention their dissatisfaction with their functioning. The central bank only contains two lifts for the entire 500-plus residents, a ratio that creates a bottleneck so severe it required residents to form queues at particularly busy times. This scarcity is exacerbated during frequent outages. Roland explains:

I just never understood why there was only two lifts... We're talking about 5, 600
people living on site too. Lifts between 9 and 9:30, you know, between 8 and

> *8:30 in the morning when people are going to work. It's crazy! So you can*
> *imagine what it was like when one was broken down as well.*

In the minds of some residents, this problem is emblematic of Old Oak's insufficient ability to deliver a baseline standard of living. Some understand this oversight, and others like it, as a manifestation of The Collective's indifference to handling the actual details of operating a large-scale residential complex. Others view it as a byproduct of the cost-saving imperative inherent to the real estate business. Either way, facing this daily source of frustration beyond their immediate control re-affirmed the consumer-landlord relationship that is often concealed behind the utopian rhetoric of co-living. As Evan explains, the concept of living as a service is laid bare as a financial exchange when that frictionless service is disrupted:

> *If I'm just paying and if there's something wrong I want to say, "Hey, I want the*
> *elevators to start working. This is not working. I want to do this or that." Then I'm*
> *a consumer and I pay for it and I demand it.*

In addition to being a moment where Old Oak's product-like nature bleeds through into daily life, the lifts also produce a lived experience that captures the heterogeneity of co-living. As the lifts are central to movement within the tower, they host various moods and energies, each overlaps as the assort rhythms of life in Old Oak ebb and thrum.

Weary office workers ride up with their briefcases as students ride down to buy cases of beer, women in athletic gear heading to yoga make room for women in athleisure just taking out the trash. Residents say having differing levels of formality occupying the same lift is typical, as the platform moves between more public and more private realms—towel-wrapped residents heading home from the spa will get on only to be surrounded by business people touring the facility.

Friendly chatting and small talk are common. Yet this mix of intimacies is not without its problems. Shelly describes one instance where the public-private overlap caused problems for residents:

So [the contractor] is in the lift with her. She is in a towel, and he makes some comment, she goes, "I shouldn't have contractors ogling me in the lift!" It got played on the Facebook page and it was, it was hideous. And I didn't know him at the time and then when I met him he really just thought he was being friendly in the lift. You never know how much to say or how much not to say in that situation because it's a really weird thing between: is this my home? is it public space?

In discussing this conflict of public and private space, one resident described the building like a matryoshka doll, a concentric layering of nested spaces: at the center are the residential rooms, a completely private space, at the periphery are completely public spaces such as the grocery store and The Common. The intermediate levels—the lifts, hallways, commons rooms—are less rigidly defined, and are constantly being negotiated through various routine practices and appropriations. Due to their unprogrammed nature, residents appear to have more power in setting the tone of these liminal spaces.

Common Space

Tour the residential levels of Old Oak on a Friday night and the building reveals itself to be teeming with activity. Each of the floors' common spaces and communal kitchens are occupied to some degree. In one kitchen, several residents share beers while cooking dinner. In the library, a handful of people quietly clack away at laptops, earbuds in. In the cinema, a solitary man plays a computer game as a football match projects silently on the wall.

Even with the various activities taking place, these floors maintain a sense of unity through their aesthetics. The hallways are uniformly narrow, fluorescent-lit, and hot—the building's issues with temperature control are often brought up as a frustratingly basic oversight. Kitchens and common spaces share a similar look with muted greys in geometric patterns evoking The Collective's angular logo, a clever bit of visual branding. Even when the greys give way to warmer exposed wood in the spa and library areas, the use of clean lines and minimal decor keep things feeling cohesive and on-brand. The prevalence of hanging Edison bulbs completes the style, which reads as contemporary a mix between an Ikea catalog and a hip cafe.

As one resident explains, "They clearly put thought into the design of each room and were going to have look." Another resident characterizes it as "Everything's like gray. That's like light gray down below dark gray on the top in a tasteful way. It's kind of a little bit eighties, pointy… everything is like adult, student, halls kind of style."

However, some residents felt that aesthetic concerns sometimes trumped livability. One man jokes that the Edison bulbs—which look so stylish in photospreads—hang too low; residents had to jerry-rig additional, shorter strings to keep from hitting their heads. The same resident who complimented the overall look notes that some finishes were "shoddy" and several design choices didn't really consider use, for example, "Outside the cinema room, I have never come across such a badly designed seat… It's too high. It's, it's too long. So you just can't [relax]." A similar problem is encountered in the Secret Garden:

> There was a big table at the back with these wooden logs for people to sit on. Who's gonna have, if you were to make a dinner party who's going to sit on a wooden log for, you know, one and a half hour dinner party, you know what I mean?

Discussing the use of the common spaces with residents reveals that these rooms produce a range of spatial practices, some intended and expected, others more novel. There is always an ongoing negotiation, between residents and management and among residents themselves. For instance, Old Oak sponsors a weekly movie night in the cinema where residents can vote for their prefered feature. "But, you know," says Shelly, outside of these programmed evenings, "it's all about who gets there first and colonizes it."

This logic works in reverse as well. One resident spoke of her prefered morning routine, which was built around enjoying a hearty English breakfast in the Secret Garden, an area usually deserted in the early hours. This pattern was disrupted when Old Oak began sponsoring a morning yoga session in the same room, prompting a shift in habit:

And I'm like, you can't cook bacon while there is a yoga class going on. I mean, to be fair, I didn't think anyone would stop me. . . But yeah, it just didn't feel like quite the right thing to do.

Other instances of rooms being creatively appropriated abound. Jozien, a musically-inclined resident, found the cinema could be made a makeshift practice space, "I could just bring like a little mini PA system with me and just like plug in. Because it had like a sort of sloped floor and stuff, you can kind of practice like it was a stage." Another resident, a triathlete, unable to fully expand his limbs in his small room, was known for using any unoccupied common space to complete a stretching routine. This even extended to more intimate uses: some residents report of sleeping in common spaces when individual rooms became too hot. Others tell stories of common spaces becoming the site of impromptu romantic rendezvous after a night of drinking.

As with the piano on the ground floor, these moments where residents use space in accordance with their desires, producing space that is truly lived, are not always appreciated by the management. In some cases, measures of control have been introduced. The Games Room, once a site of weekly after-parties, is now locked after 10 p.m. to discourage late-night bacchanalias. Throughout the building CCTV cameras monitor residents behavior—small signs reading "Smile, You're on CCTV" remind residents they are always potentially observed. Staff members say this technique has been effective in reducing unwanted behavior, as "[residents] were more accountable for their own actions if there was a camera."

Still, residents have found ways to work around the surveillance. Certain common areas are more popular due to being blind spots for the CCTV system. A case in point: a corner of the Japanese Tea Room is a popular gathering spot because it is "out of sight." Here, residents can socialize and bend rules, smoking out the window without fear of being disciplined.

A small object lesson in the way common spaces are produced through an overlapping of conceived, perceived, and lived spaces is the roof terrace. These outdoor spaces are frequently highlighted by The Collective as a selling point for Old Oak; often touted as a kind of urban oasis, an escape from the hassle of life and a place to take in scenic

views. In this way they recall the sky lobbies and rooftop restaurants described by Ayoub, in that they "[allude] to the open and free character of public space" while remaining access-controlled and segregated from the surrounding neighborhood (Graham and Hewitt, 2013, p. 80). Therefore, their inclusion can be seen as a way to set Old Oak apart, and as a means to attract residents seeking a luxury lifestyle associated with high-end tower living.

However, in practice, the space is not always as popular as advertised, especially in the facility's early days. Overlooking the nearby industrial sites and exposed to the elements, the terraces were often perceived as uninviting. As one resident explains, "so then we had a roof terrace. No one was using it because then it was kind of, well it's kind of windy... and there were no facilities there." Another concurs, "I mean now they put some AstroTurf down and some seating area, but for the entire time I was there it was just pavement out there and tables and chairs. I'm like, what is this space?" As a result, the expected spatial practices—convivial parties, relaxed lounging—did not manifest regularly.

Yet, this area did not remain fallow; residents made a range of attempts to appropriate for their own purposes. Evan describes skirting the frequently-crowded laundry facilities by setting up a clothesline out on the under-used terrace. There has also been talk of building a roof garden. Though Evan hedges that this project would require support from the management to succeed as Old Oak's rapid turnover makes it hard to maintain the continuity of care needed for such an endeavour. However, this type of resource allocation is always subject to business concerns:

> *And like I said, you know, it's a business. OK, how many resources are we gonna put into a vegetable garden? Does it add revenue?*

Communal Kitchens

In interviews, Merchant suggests that communal kitchens may be the most important common spaces for co-living as they provide a gathering space in the mold of traditional domestic life, stating "when you're growing up, friends and family tend to congregate in the kitchen and we can see that continuing in Old Oak," (Wonderland, 2016).

Speaking to residents, it is clear that this vision largely plays out. Shared between 50 to 60 people per floor, each communal kitchen is a natural eddy, pooling the flow of residents and creating a recurring gathering point. Fittingly, residents understand the kitchens as a space for socializing. Roland describes how this characteristic was so reliable as to become part of the structure of his daily routine:

> *In the evening time, I would cook in the communal kitchens and chat to people after they had finished work. I used to spend a lot of my evenings in the kitchens... it was probably my most used space.*

Such heavy use results in predictable problems: dishes go unwashed, grime accumulates on cooking surfaces, and utensils and cookery go missing. These are the typical problems that emerge from shared cooking facilities and are in a way a natural complement to the domestic gathering extolled by Merchant. Even so, the chaos and unreliability of the kitchens does wear on residents. Marge explains:

> *It's just so tiring, you know, life is already tiring. You don't need the shit when you come home, you know? I want to come home, I want to go to a kitchen that has a fucking frying pan, that's clean, you know, and a spoon.*

It is possible to chalk up these issues to the diffusion of responsibility that occurs when a space is shared between so many individuals, many of whom are transient. In interviews, residents and staff make similar observations on the issue. Here, one resident portrays the problem succinctly:

> *You have to take care in the design of the building or make it into a kind of structure that people do feel responsible and feel connected to it. Because if they think it's so anonymous and... you know.*

A former staff member concurs, noting that such a large population stretches the domestic/family gathering metaphor past workability:

I mean otherwise, you know, if you kind of live in a flat with a few people then responsibility is more concentrated. So once the olive oil starts missing, you only have three people to hold accountable to. In that building, you have around 400 to [make] accountable

As if recognizing the overwhelming difficulty of making a shifting population of several hundred people feel a personal responsibility, the management responded to ongoing complains with a more top-down approach: CCTV cameras were installed to encourage more discipline. While some residents feel this technique is effective, others also feel it further degrades the community feeling these spaces are meant to foster. One resident says the cameras make the space feel "commercial." Julia recounts the mixed reception the cameras have among Old Oak's population:

People do request them. On one side there were the people who said, "why do we need cameras?" It's like, oh, it's now Big Brother. But on the other side, if something bad happened or their olive oil was disappearing, it was like "Can you check the CCTV, please?"

Rooms

Finally, having completed a tour of Old Oak from the outer fringes of its neighborhood through its ground floor and common spaces, we arrive at the private residential rooms. Compact or cozy depending on who you ask, these small rooms are the only spaces meant to be truly private in the building. In discussing their conception, The Collective's founders often describe them as "crash pads," almost auxiliary spaces for residents to store their sleeping bodies and a small collection of material goods. These rooms are the "volumes of space" discussed by Lefebvre in relation to abstract space. Produced as abstract commodities, exchangeable and uniform, they are "the triumph of homogeneity" which allows space to be "produced and reproduced as reproducible."

In practice, residents do perceive the rooms as too small to contain all the usual activities needed to sustain a balanced lifestyle. Most report the compactness is effective in encouraging the use of communal spaces—a detail sometimes ascribed to clever social engineering through design and other times to a more cynical cost-saving

mindset. Evan describes how the small size generated two polar responses, making residents more active outside the room and less active inside:

> *Maybe the awful thing is I just do loads of stuff on my bed now. If I'm watching telly, I'm on the bed. If I eat my dinner and I didn't want to get into the shared kitchens, I'm on my bed. It does both. It does force you to use the shared spaces, but it also encourages you to be a bit more of a slug because... that's really the only space.*

The size of the room also creates certain expectations as to the type of person who should live in Old Oak. Namely, most residents feel that the rooms meet the needs of only single people with no children. A few residents expressed amazement at the few couples who cohabitate, sharing the rooms—"literally I do not know how they survive." And while there is at least one nuclear family that lives in Old Oak—they are profiled on The Collective's Old Oak blog—it is far from the norm. Some residents even observed that getting into a serious romantic relationship is a motivating factor for leaving the co-living facility.

The residential rooms of Old Oak are further produced as a transient space as they discourage the type of material accumulation usually associated with long-term residential living. There is a mild prohibition against adding any type of decor that may leave permanent marks on the walls. However, as many residents expect to move on quickly, taking such initiative seems rare. One resident describes how fellow Old Oakers were surprised by how home-like her room appeared:

> *Whoa. It's so lived in!" Yeah, this is my home, this is where... like I don't have anywhere else. And she was like, "Yeah, well for us obviously we're here for three months. It's like it's kinda like living in a hotel a little bit."*

This hotel feeling is compounded by the lack of storage, as one resident put it, "You can never feel fully like you're going to be there a long time if you can only fit about like the quarter of your wardrobe into your room."

Social Media

I think a lot of people would have moaned about it on the Facebook

Lefebvre warns that in considering social space, one should not take physical structures for granted, as "visible boundaries, such as walls or enclosures in general, give rise for their part to an appearance of separation between spaces where in fact what exists is an ambiguous continuity, (Lefebvre, 1974 [1991], p.87). One of the most significant ways that the space of Old Oak transcends these physical limits is its relationship with the internet.

Old Oak residents are generally tech-savvy—many work as digital nomads and coding club remains a popular social activity. Unsurprisingly, in producing the social space of co-living the physical world and the internet are in constant interaction, each seeping into one another: residents discuss problems from the physical world on the Old Oak Facebook page, share images of real-life events on Instagram (#thecollectiveoldoak), and rely on a variety of apps to manage services like food delivery and dry cleaning. In many ways, this conforms to the "everything at your fingertips" ethos touted by The Collective.

Many residents interviewed made a point of mentioning Old Oak's Facebook page. In the gaps between The Collective's "town hall" style feedback sessions, this social media page plays the role of a public forum for residents to communicate with management and each other. While there are plans for a specific app for residents, most turn to this page. As one resident recalls, "All the communications went through Facebook."

In many ways, the page works as a more interactive version of the social calendar placed by the elevators. Residents can stay informed about which events are taking place and participate in decision making, for instance, voting on which films to show in the cinema room. However, the page is also a place to air grievances. One resident describes how residents found utility in publicly posting complaints to build support for problems to be addressed:

> *You easily go downstairs and say, "Hey, this is broken or whatever, can you do*
> *something about it or whatever." But then people felt more comfortable about*

ranting online… You get this mob mentality to get this kind of frenzy that, you know, "This is wrong!" and "We shouldn't even be..." "Where are the pitchforks?"

In this way, the internet becomes a space where residents could leave behind the more cordial community spirit of co-living and be more explicit about their relationship to Old Oak as a service being paid for.

A former staff member corroborates this pattern. In addition to being surprised by the degree to which residents relied on the internet—" They don't want to come downstairs and ask the person. They just want to get it online and that's it"—she was also surprised by how differently the community acted online, "So we had the Facebook group, parallel with the community at the same time. And there were people who had so much balls on the Facebook group, but face-to-face they couldn't say a word out."

When asked to characterize Old Oak's online community, Shelly conveys a specific incident which captures Facebook's dual use: It is both a tool to petition management and another common space where members socialize, even if they are not physically present at the building. Here, Shelly describes following a Facebook discussion from her workplace in central London:

There was this whole thread about whether we were getting a pet or not here. Which clearly not. It's, you know, it was plastered all over the terms and conditions that no animals are going to be living here. But you could see some people genuinely thought that they might persuade the management through the Facebook page that we would get a pet. And then there were people like me and other people who just egging the conversation on to be absurd. I mean it was hilarious.

The digital realm helps extend the social space of Old Oak in another way. While the official Facebook page is reserved for current residents, former residents make use of an Old Oak Alumni page to stay in touch. Even though all its members have departed from the physical site of the building, they extend the social space of Old Oak spatially, beyond a building in Willesden Junction, and temporarily, beyond the tenure of their stay.

Discussion

In *The Production of Space*, Lefebvre likens space to white light: pristine and unified appearance, but capable of being decomposed through the prism of analysis. Careful scrutiny pulls apart space's constituent elements forcing the "recognition of conflicts internal to what on the surface appears homogeneous and coherent—and presents itself and behaves as though it were," (Lefebvre, 1974 [1991], p. 352). As the previous sections have demonstrated, examining the production space of Old Oak does reveal a complex interplay between the three elements of the spatial triad. Nearly every room, event, and architectural detail is a palimpsest where the conceived, perceived and lived space overlap, sometimes in harmony, sometimes with dissonance. The resulting space produced is complex, in the mold of the "flaky mille-feuille pastry" Lefebvre uses as a metaphor. Yet, significantly, it also functions in many ways as abstract space, which is necessarily a space fraught with contradictions (Lefebvre, 1974 [1991], p. 52).

The representations of space at work in old Old Oak produce the co-living facility as self-contained and frictionless. By its managers, planners, and designers, it is imagined as a product, a service that can be tapped into, availing itself to the needs of a transient workforce. Stacked with the amenities and aesthetics associated with contemporary urban regeneration and start-up culture, it is oriented towards a Weberian ideal type: professional and aspirational, socially-oriented yet concurrently atomized and single. The anticipated community of Old Oak is implicated in this production as well, envisioned as a Ship of Theseus: a coherent whole sustained by a continual churn of its individual members. Underlying this operation is the logic of accumulation, as the steady turnover of residents collects capital to be circulated through London's expanding real estate and financial nexus.

The space secreted through the spatial practices of Old Oak both conform to and erode these representations of space. Residents produce and reproduce a grand cycle of onboarding, living, and departing. Within each cycle, residents produce epicycles, the circuits inscribed by their daily and weekly routines. Here individual perceptions of Old Oak's space inform activity: some, feeling invited and invigorated, loaf in common areas and mingle at events; others driven by alienation or ambition withdraw into patterns

defined by work and serviced living. Where one resident interprets the facility's sleek decor and compact residences as elements of an urban haven to cultivate, another reads them as depthless and an invitation for only cursory engagement. Both act accordingly. In aggregate, these perceptions and practices propound and presuppose co-living space.

Finally, overlaying Old Oak's physical space and shooting through its spatial practices like a live current, is the space of representation. Through this lived space of co-living emerges the spontaneous actions and the symbolic appropriations which enliven and unsettle conceived projections with their poesy. This is the space of festival: it is the unplanned common room sing-a-longs, the illicit joint smoked out a window, the eros and enmity that arises from hundreds of people dwelling in close physical proximity. Sometimes lived space is undirected, the surplus of life beyond what is planned—for example, residents derailing public discussions the joy of it. In other cases, it is instrumental, consciously undermining implicit structures—a resident organizing unwanted events or creatively misusing facilities.

Each of these spaces contributes to the production of space at Old Oak. And throughout all the overlap and interference of the triad, the eminence of abstract space looms. It is notable how closely Old Oak's form of co-living broadly mirrors the *housing* of abstract space. Lefebvre characterizes this development as living arrangements produced to better fit the needs of capitalist production: "minimal living-space, as quantified in terms of modular units and speed of access; likewise, minimal facilities, and a programmed environment," (Lefebvre, 1974 [1991], p. 316). More specifically, the elements of abstract space are pervasive throughout this analysis.

First, the abstract space of Old Oak is "homogeneous yet at the same time broken up into fragments," (Lefebvre, 1974 [1991], p. 342). It is homogeneous in its existence as a commodity or product. Given the dominant mode of production, it is reduced to its value and placed as equal with any other asset in an investment portfolio. In being produced for exchange, its particularities are effaced. Each room is the same and the community is "like-minded." In its self-containedness, even the location's distinctiveness is subordinate. Its form can be iterated in any spatial context that will sustain accumulation—already construction of additional facilities is planned and anticipated in

other world cities. As Lefebvre states, abstract space is "space is reproduced as reproducible," (Lefebvre, 1974 [1991], p. 337).

However, its space is fragmented too: each nearly identical room is parceled and rented. In this exchange, each individual resident forms a separate, atomized relationship with the proprietor. Old Oak's leases and contracts bind residents not to each other as a community, but to The Collective as a landlord. This relationship is fragmented in time, too, as residents do not cycle through their tenure in coteries, but each according to an individual timetable. And as Lefebvre continually stresses, "exchangeability implies interchangeability," and any individual completing this exchange is equal to any other. As one resident says, "an occupied room is an occupied room."

The space on site is fragmented too by the programming and hierarchies produced, as abstract "space is divided up into designated (signified, specialized) areas and into areas that are prohibited (to one group or another)," (Lefebvre, 1974 [1991], p. 319). Old Oak's designated areas abound: areas meant for sleep, areas meant for socialization, areas meant for fitness or consumption. All these divisions regulate and impose structure. Prohibitions too regulate abstract space: keycard access, schedules of events, prohibitions on where and when alcohol can be consumed. These, too, are the hallmarks of abstract space.

Abstract space is also discernible in the ahistorical nature of Old Oak, the way it "abolishes former meanings." This is seen in the disjuncture between the facility and it its surrounding neighborhood—the facility refers to its history in name only. Nothing remains of its former existence as an office block, nothing of the neighborhood's own varied history filters into its social space. Even each individual resident arrives to a room with no history, it sterile and new—former residents are not meant to leave a trace. Residents can even efface their own history. In join Old Oak residents may dissolve their previous social relations—"you can completely reinvent yourself," as one community manager explains.

Abstract space inherently carries the seeds of its own contradictions, and this is no different for the space in question. At the heart of Old Oak's contradictions is the premise of producing community (use value) and the simultaneous expectation that it must

produce profit (exchange value). Lefebvre identifies this contradiction as "the clash between a consumption of space which produces surplus value and one which produces only enjoyment—and is therefore, 'unproductive,'" (Lefebvre, 1974 [1991], p. 359).

This condition, the always and eventual subordination of the lived to the conceived, will remain as long as co-living operates in conjunction with London's financialized mode of production. The lived space remains momentary and sporadic, erased with each churn of residents, and the facility continues its function as an asset. Thus, "the more completely it falls under the sway of those 'agents' that have manipulated it so as to render it unifunctional—the less susceptible it becomes to appropriation." (p. 356) For all the lived experiences and appropriations of space by Old Oak's residents, the utopian ideals of community sought through commercial co-living remain unrealized; "existing property and production relations erase these prospects," or at least, keep them just out of reach (p. 357).

Conclusion

This paper set out to examine the space produced at contemporary commercial co-living facilities by focusing on a case study of one prominent example of the form, The Collective Old Oak. Furthermore, it placed this space in context, discussing this instance of co-living in relation to the current economic conditions of London. In order to perform this task, a variety of qualitative data was gathered from desk research, semi-structured interviews, and on-site observations. This data was analyzed using Lefebvre's spatial triad as a theoretical model, with special attention to the tensions between conceived, perceived, and lived space. Finally, it explored the degree to which Old Oak could be considered an abstract space.

The resulting analysis reveals that the space produced by this particular model of co-living is complex and occasionally contradictory. It is also deeply entangled with the economic conditions with which it was produced. The texture of daily life at Old Oak is composite where the conceived function of the facility is reproduced and contested by practices and appropriations of its residents. The central contradiction that emerges from this interaction comes from Old Oak's dual role as an abstract space and a place for community. The Collective designed and operates the facility as a business and an

asset and included elements to optimize it for these ends. While residents may temporarily enliven the space, the planned transience of the population ultimately prevents any sustained community from truly making the space its own.

These findings illuminate in which contexts this form of co-living may be successful, and where it may be inadequate. This research suggests that enterprises using Old Oak's model may continue finding success in major cities where a booming economy will attract a young workforce in need of easily-accessible temporary housing. As long as a city's housing market remains as competitive and expensive as London's, this residential arrangement may continue to be attractive. However, while commercial co-living offers a workable solution to a specific demographic—younger, transient, single—it does not appear to be a blanket solution to a city's lack of affordable housing, or the social disruptions such crisis causes. Spaces like Old Oak appear to offer little in terms sustaining what Lefebvre calls "the acquired characteristics of city life... security, social contact, facility of child-rearing, diversity of relationships, and so on," (Lefebvre, 1974 [1991], p. 364).

As Old Oak, and commercial co-living in general, is still a relatively novel formation, it is difficult to forecast how it will develop as time goes on. Future studies should examine whether long-term operation of this facility results in any different dynamics, or whether the establishment of co-living as a viable option leads to any different patterns of use. Additionally, co-living facilities like Old Oak will continue to be built and operated in different locations, cultures, and contexts. Additional research should be made into how these variables influence the production of space in each instance, and whether different variations on this structure achieve a different range of outcomes.

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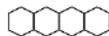
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