

The rise (and rise) of vertical studentification: exploring the drivers of studentification in Australia

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Abstract:

The conditions for studentification are changing with increasing numbers of students living in high-rise – and high quality – micro-apartment-style living provided through purpose built student accommodation (PBSA) blocks. This ‘verticalisation’ of studentification is a global phenomenon, with Australia representing a frontier with distinctive geographies that result from its rapid ascension to the second-ranked global destination for international students. Yet, despite rising student numbers being recognised as positively impacting national and state economies, little is understood of how student accommodation development fits within the broader scheme of Australian urban revitalisation. To address this, we combine concepts relating to condo-ism and condo-isation to offer an original analytical framework that examines how PBSA has created new conditions through which vertical studentification can be produced *in* and *of* cities. We ask how vertical studentification relates to wider Australian housing and urban development trends in ways that differentiate PBSA development and trajectories from other forms of accommodation. We also question how vertical

studentification relates to the realities and regulation expressed as intra-urban geographies of Australian university cities and their resident-host communities. We argue that deliberately recognising and dovetailing several self-reinforcing and contradicting urban development dimensions, invites a foundation for further interrogating vertical studentification in existing and emerging sites in Australia and beyond.

Keywords: studentification; purpose built student accommodation; higher education; Australia; condo-ism; condo-isation.

Introduction

The purpose built student accommodation (PBSA) market is accelerating fast, with global investment totalling US\$17.1bn in 2018, representing a 425% increase since 2008 (Savills, 2019a). Accommodating higher education (HE) students is therefore a highly pervasive form of contemporary urban change, with increasingly mobile networks of students altering the landscapes of studentified cities – cities that host universities – across the world (Garmendia et al., 2011; Donaldson et al., 2014; Prada, 2019). Smith (2008) originally defined studentification as an outcome of residential change due to the seasonal in and out-migration of students. However, contemporary understandings of studentification view the proliferation of PBSA blocks as operating differently; having alternative drivers and producing different outcomes to its initial UK/US-centric wave in the early 2000s. Studentification is therefore firmly part of the lexicon of contemporary cities through the evolving commodification and consumption of space (He, 2015) and the policy directives that shape how and where studentification might feasibly exist (Sage et al., 2013).

We repurpose Garmendia et al.'s (2012) term 'vertical studentification', redefining it to critically examine PBSA developments that are aimed at re-packaging and marketising student experiences through high quality, micro-apartment-style living (Smith and Hubbard, 2014; Gurran et al, 2019). Where Garmendia et al.'s (2012) vertical studentification relates to students occupying privately-rented flats in apartment blocks, we focus specifically on student-only PBSA developments. Moreover, duplicating the word 'rise' in this paper's title emphasises both the persistent spread of studentification in university towns and cities, and signals how vertical studentification contributes towards contemporary understandings of three-dimensional cities as a sinuous blend of symbolic, social, political, and everyday life (Rosen and Charney, 2016). Graham and Hewitt (2013), for example, call for research that engages with the verticality of urban locations; while Harris (2014) advocates more holistic understandings of three-dimensional cities that critique the spatial [in]equalities of overhead and underground built environments. We therefore argue for new interpretations of students' distributions in cities that extend beyond the horizontal spread of 'first wave' studentification (Smith, 2005). To achieve this we draw upon notions of 'condo-ism' and 'condo-isation' (defined later in this paper) to critique how and why PBSA offers distinct ways of (re)interpreting studentified landscapes. Our application of these concepts requires attending to how PBSA materially reflects the much-rehearsed volumetric verticalisation of cities that are essential to articulating urban neoliberal agendas, as well as symbolically representing growth and prestige in globally-competitive markets (Nethercote and Horne, 2016). Vertical studentification therefore differentiates PBSA from traditional 'horizontal' studentification for three reasons. First, PBSA is developer-led and couched in ideologies of the neoliberal HE landscape. Second, as a building type,

PBSA typically manifests as high(er)-density, large-scale, and private student-only accommodation developments. Third, through scale and multiple developments, PBSA is embedded in, and alters, urban neighbourhood geographies beyond the piecemeal remit of horizontal studentification, including: on-campus shared dormitories, off-campus shared suburban housing (e.g. students living in housing in multiple occupation (HMO)) and privately-rented apartment living (see Nakazawa, 2017 for a comprehensive review).

Yet, beyond recognising vertical studentification as a powerful driver for mobility and neighbourhood change, this contemporary interpretation identifies PBSA as totemic of the highly competitive neoliberalised knowledge economy that is shaping HE networks in global cities (Ruming and Dowling, 2017; Revington and August, 2019). As studentification shifts from local transactions between individual students and landlords to a global developer-led phenomenon through PBSA, so too are the market characteristics changing. Kinton et al.'s (2018) UK example positions students as having specific consumption-driven desires for quality that oppose traditional readings of studentification that 'downgrades' neighbourhoods (Smith, 2005). They expose different modes of studentification that operate along diverse social, cultural and economic lines, aligning studentification with other social and political issues within cities. Nevertheless, the location and spread of studentification remains a vital dimension of debates on how to mitigate its relative impacts upon communities. Policy directives are regularly implemented to limit the concentration and range of studentification and push students away from residential neighbourhoods and into the frontiers of university towns and cities (Smith and Hubbard, 2014). Moreover, He's (2015) Chinese context implies that contemporary studentification requires close alignments between institutional, community and

consumer actors that are couched in top-down regulations set by the state. Yet, this sits in stark contrast to the highly-marketised developments found in other countries – like Australia – that promote PBSA as aspirational lifestyle choices (Smith and Hubbard, 2014; Holton, 2016) and often pit prospective PBSA developments competitively against other local forms of residential, commercial and industrial provision (Kinton et al., 2016). Indeed, Davison (2009) identifies ‘first wave’ Australian studentification as a ‘grass-roots’ process that, contra to US and European models, appears as pre-gentrification in Australian cities. Competing with Australia’s appetite for the suburbs, Davison’s (2009) Melbourne example identifies students’ inner-city residences and lifestyles as sowing the seeds for subsequent waves of gentrification by other demographics in the 1960s.

To explore how contemporary Australian studentification aligns with this complex global market we critically review a range of academic, industry and media literatures pertaining to Australian student housing. In reviewing the extant literature we examine how vertical studentification is constituted through the three dimensions of condo-isation – financialisation, juridification and commodification. Next, we investigate the material and social impacts of vertical studentification upon Australian cities using a condo-ism approach. Finally, we outline the cultural implications for vertical studentification in Australian cities and caution global cities and developers from adopting it uncritically.

Australian studentification – an emerging context

To advance existing global studentification debates, we present Australia as a unique frontier for examining emerging vertical studentification in terms of its relative age in the student housing market, the rapid internationalisation targets that have

emerged in recent years and the social and cultural inequalities evident within Australian HE (Fincher and Shaw, 2009; Kerstens and Pojani, 2018). In doing so we identify three key questions that require further exploration:

1. Might an understanding of vertical studentification be enriched through knowledge of wider Australian housing and urban development trends in ways that differentiate PBSA development and trajectories from other forms of accommodation?
2. How does vertical studentification relate to the realities and regulation expressed as intra-urban geographies of Australian university cities and their resident-host communities?
3. What are the social and cultural implications for vertical studentification in relation to the placement of, and engagement with, PBSA?

These questions are important, specifically in relation to how PBSA developers are responding to emerging national trends of international student mobility within a global knowledge economy that have subsequently created shortages of quality bedspaces for international students.

As one of the world's most-recently developed HE markets, Australia is currently experiencing a HE boom with student numbers rising by one third between 2008 (1,066,095) and 2018 (1,562,520) and international entries expanding from 294,163 to 431,438 over the same period (Department of Education, 2019). These increases are recognised as positively impacting national and state economies (Knight Frank, 2018) and all levels of government are seeking policies that promote quality and accessible HE institutions (HEIs); developing overseas recruitment; and increasing student accommodation. For example, international education contributed AUD

\$33bn into the country's economy in 2018, an increase of 15.5% since 2015 (JLL, 2019). Moreover, with over 26% of students recruited from overseas (Savills, 2018b), Australia has now eclipsed the UK as the second-highest ranking destination for international students globally. This is important as 20-30% of operational revenue for Australian HEIs derives from international student fees (Knight Frank, 2018).

In terms of accommodation, Australian PBSA has grown from 60,000 bedspaces in 2015 to 97,875 in 2019, with 16,900 bedspaces in the pipeline to 2022 (Savills, 2019a). Yet, Australia has one of the largest shortfalls of university provided bedspaces globally (11 students to one bed, compared with 1-5 in the UK (Knight Frank, 2016)), constituting availability for approximately 16.5% of the student population across the top six capital cities (Table 1). While this reflects an historical appetite for domestic students choosing local institutions, the sharp rise in student numbers misaligns with the bedspace profiles for Australian cities. The total market penetration rate of university and privately-managed student accommodation constitutes a fraction of the total student populations for the top six Australian capital cities in terms of total and PBSA bedspaces (Table 1). Contrasts also exist between the occupancy for international and domestic students. This emphasises how increasing international student numbers exacerbate bedspace shortages. Moreover, an uplift in domestic students leaving home to attend university has emerged, with 120,562 (17% of all domestic students) occupying PBSA in 2017, up 15% since 2012 (Savills, 2019b), further straining an already-saturated student housing market. Hence, while Australian studentification may be an emergent process, these rapid changes have outstripped scholarly, industry, and government understandings of how to respond to the drive towards large-scale PBSA development, and how this

fits within the broader scheme of urban revitalisation: including housing provision, mobility, demographics, employment prospects, and consumption behaviours.

[Insert Table 1 here]

Our conceptualisation therefore advances work on urban student geographies that include: societal and institutional preferences (Silver, 2004); financial, policy and legislative factors (Smith, 2008); contrasting mobility practices (Holton, 2015) and changing tastes and fashions for living during study (Holton and Riley, 2013).

Moreover, vertical studentification can be conceptually couched within broader intra-urban geographies that refer to the location dynamics (concentration or dispersal, distribution, and relative position to transport and targeted universities), and strategic metropolitan planning priorities such as housing that is affordable, sustainable over the lifecycle of the building, and promotes liveable integrated communities where lived experiences for students, host neighbourhoods, and HE stakeholders are functional and equitable in their (sub)urban and educational contexts (Colliers, 2016; Knight Frank, 2018).

Our Australian PBSA case examines how the rapid adoption of PBSA investment models presents new opportunities and implications for Australian university cities. We extend previous research (e.g. UK (Smith and Hubbard, 2014); North American (Moos et al., 2018); Chinese (He, 2015), Chilean (Prada, 2019) and European (Garmendia et al., 2012) contexts) by arguing that PBSA is about more than simply accommodating students. Vertical studentification encapsulates the multiple, intersecting urban changes *and* the increasing appetite for vertical and higher-density living in global cities that depend on a range of temporal and spatial factors (McGuirk and Dowling, 2009; Nethercote and Horne, 2016). Moreover, our reading

of vertical studentification enriches studentification debates by using the concepts of condo-ism and condo-isation that are outlined in the following section. This Australian lens casts PBSA as creating new dynamics through which cities might experience studentification. Studentification changes, for example, align with contemporary urban redevelopment processes that strategically promote vertical living. Further, the more-or-less coordinated coalescence of HE actors – national, state and city governance, housing developers, universities, financial and professional services and students – mutually reinforce these new urban conditions as they manifest in global cities.

Viewing vertical studentification through condo-ism and condo-isation

In making sense of vertical studentification in the urban milieu, we compare the PBSA rise in Australia to the rising skylines of earlier condominium ('condo') developments within Global North cities. This comparison is important as many cities have wrestled with the evolving high-rise implications relating to strategic planning, design quality, equity, precinct development and longer-term revitalisation – specifically for new(er) contenders seeking global city status (Rosen and Walks, 2013; 2015; Webb and Webber, 2017). Moreover, this association usefully recognises PBSA as multi-functional spaces operating simultaneously as residential homes, investment vehicles and ways of transforming urban dynamics. A condo can be defined as a building that is subdivided to contain a number of privately and individually owned apartments that share common land and facilities (Lippert, 2012). Condos therefore operate as a financial and legal context of home ownership (Webb and Webber, 2017) and a way of life (Rosen and Walks, 2013). Indeed, the brevity and allure of the term 'condo' belies a complex transformation to concentrating urban

development and the socio-spatial geographies that result *within* the buildings and *across* urban landscapes.

Significantly, reviewing this literature reveals divergent terms and definitions of the condo. 'Condo-ism' refers to the neoliberal ideological logic of tower development (Rosen and Walks, 2013) and speaks widely and directly: from macroeconomic and financial mechanisms to micro-economic behaviours (Rosen and Walks 2015; Rosen, 2016). Moreover, condo-ism:

“[...] refers simultaneously to the self-reinforcing processes re-producing intensification, downtown living and gentrification via condo-tenure, as well as to the financial-construction nexus at the heart of condo development, and the social, cultural and political transformations that they are begetting” (Rosen and Walks, 2013:160).

Condo-ism, therefore drills into the 'neoliberal spatial fix' and privatisation development opportunities that include complex gentrifying scales ranging from inner-city precincts to micro-living residential design. Conversely, 'condo-isation' addresses the constitutive process of legal and social relations within a defined space with consequences for *inner* condo governance and life. Lippert and Steckle (2016) provide three dimensions of condo-isation – financialisation, juridification and commodification – that explore the financial and legal contexts which constitute the condo. Condo-isation is therefore a means of governance through “a constitutive process reliant upon various knowledges” (Lippert and Steckle, 2016:135) – rather than as an ideology, as with condo-ism.

Our use of condo-ism and condo-isation underwrites the industry literature and media reporting on the national and international trends in vertical studentification

drawn upon in this paper. This speaks to the microeconomics of choice relevant to mobile populations, which is relevant to the analysis of international HE students and PBSA discourses circulating in a global knowledge economy. We therefore, situate PBSA discourses within *condo-ism* but groundtruth the reporting and trends in terms of *condo-isation*. This draws together the overlapping dimensions of planning, geography and the law of community in relation to condo living to promote “greater social and sustainable [...] outcomes” (Leshinsky and Mouat, 2013:11) for communities. This is important in relation to the sustainability of provisioning accommodation for transient populations, such as students, in any global city. Yet, exploring the intersections of *condo-ism*, *condo-isation* and vertical studentification first requires explicit recognition that condos are “a mixed property regime” around legal ownership – rather than the commonly-assumed material form (Rosen and Walks, 2013:161) – wherein the norms and competencies associated with enduring property relations (Blandy et al., 2018) are recalibrated with under-examined long-term implications for neighbourhoods (Webb and Webber, 2017). Extending this exploration to Australian PBSA warrants a corresponding understanding of vertical studentification as a specific manifestation of *condo-ism*. We observe this as arising auspiciously from the strategic rapid growth in Australian HE and educational services as neoliberalised global economic commodities (Marshall, 2019) and cosmopolitan agendas for ‘improving’ student experiences (Arkoudis et al., 2019) by developers and HEIs.

More broadly we scrutinise the PBSA prerogative of students going home from campus to an ideally-sited PBSA with, to paraphrase Lippert and Steckle (2016:138) “a close your door and [just get on with your studies]” lifestyle. This dovetails vertical studentification with wider concerns over ‘youthification’ (Moos, 2016) and the re-

urbanisation of cities by young people that is characterised through contemporary young[er] generations' diverse and adaptive housing pathways (Clapham et al., 2014; Moos et al., 2018). This bridges the penchant in urban geography for focusing on development with the preference in socio-legal studies for centering on 'inner' private urban governance. For example, Australia's rapid rise in PBSA provision – relative to the established USA and UK markets – coincides with a boom in condo-ism and youthification since 2011 (Bruce and Kelly, 2013; Opit et al., 2019). Hence, the developer-investor models dominating condo-ism and condo-isation take boutique expression in PBSA as investment.

Interpreting vertical studentification through this confluence of condo-ism and youthification provides a platform that disrupts conventional student housing provision for universities to leapfrog up ratings and improve attractiveness and distinctiveness to international markets. Vertical studentification leverages development opportunities where condo-ism and condo-isation meet youthification in university locations. Notably Savills (2018a) position Australia as the eighth most youthful country in the world. Yet, common among most global cities, while younger demographics are shaping housing demand, rising real estate costs prevent young people from accessing housing markets, refocusing developers towards more flexible rental products that appeal to a broader range of occupiers. This market adaptability is precisely what makes vertical studentification a distinctive and persistent urban process. Our Australian example suggests that while many new-build developments have suffered in the wake of deep and successive global recessions since 2008 (Yates and Berry, 2011), the global PBSA market has, to date, remained remarkably buoyant (Smith and Hubbard, 2014).

Constituting vertical studentification – financialisation, juridification and commodification

We commence with Lippert and Steckle's (2016) characteristics of financialisation, juridification, and commodification that constitute condo-isation to offer new understandings of sustainable urbanisation in relation to vertical studentification.

Financialisation

Financialisation is the structural transformation of attitudes towards housing provision and private/common living space through the convergence of various allied actors associated with finance, including: investors, real estate firms, developers, shareholders and the state (Fields, 2017). This positions housing (existing and future provisioning) in terms of investment and profit, effectively commodifying everyday life and domesticity. Globally, PBSA providers use financialisation as a highly-visible device to drive forward strategies for PBSA design, placement and capacity. Here, careful marketisation of PBSA as “a one stop shop for secure, well managed, high-quality accommodation” (Savills, 2015:8) homogenises international student lifestyles as ‘high-end’, and labels students as “highly sophisticated consumers” (Knight Frank, 2018:2) that are likely to buy into PBSA due to their unfamiliarity with local housing markets. In Australia, such framing by PBSA developers and providers through asset-classing generates a student accommodation pipeline approach that primarily targets the Australian Group of Eight (Go8) universities (specifically Melbourne and Sydney) (Savills, 2019b, Urbis, 2019). This shifts away from ‘PBSA as property’ to trends of ‘PBSA as infrastructure investment’ that compete with campus development plans (AMP, 2019).

While Australian PBSA is increasing, the flurry of construction to 2018 slowed, specifically among studio-led schemes. This aligns with an easing of national residential markets and reduction in land values and reflects wider concerns over affordability and community-driven options, such as cluster-style shared accommodation (Savills, 2019b). The Property Council of Australia (2019:np) is, however, optimistic that relatively lower than global rates of the market penetration of Australian PBSA could generate “considerable scope [for growth a]s the prime Australian PBSA market moves from the development cycle into the operational phase, whereby the capital shifts from opportunistic to value-add and core”. This financialisation message reveals nuanced and competitive understandings of PBSA provision aimed squarely at developers, universities and city/state planners, yet positions financial services and real estate firms as influential drivers of PBSA production. Despite having several main operators in Australia, PBSA remains a “fragmented industry in terms of geography and ownership” (Urbis, 2019:10) where hybrid variations are increasingly appearing. Melbourne and Sydney are saturated while growth areas, including Western Australia, use more affordable middle-tier PBSA products (Savills, 2019b).

Juridification

While juridification is a complex and ambiguous term, we consider it as the ways in which legal services direct rule-guided action from the state into the private sphere and then on to the individual (Blichner and Molander, 2005). Juridification exists in the PBSA market, whereby the global restructuring of HE in the 2000s, alongside neoliberal ideologies, shifted responsibility for accommodation provision from the university and state, to private landlords and, more recently, developers (Chatterton,

2010). Lippert and Steckle (2016:139) specify “the role of legal knowledge in constituting the condo” materially, symbolically and as a way of life. Here, knowledge and language reinforce particular ideologies of condo-isation among different stakeholders. New actors have subsequently been introduced into the PBSA market, including legal and financial services, property developers, construction firms, cleaning contractors and marketing services. Aligning with Lippert’s (2012) work on the legal flows of knowledge on condos, this proliferation of players juridifies the PBSA market, drawing together and consolidating new types and ways of articulating knowledge that mitigate risk and uncertainty in this burgeoning market. A plethora of industry literature exists, originating from professional service providers (e.g. Savills, Knight Frank, JLL and Colliers, amongst others), that is designed to market PBSA to global investors. The central theme running through this concerns risk – specifically risk mitigation and the language used – that exemplifies juridified expressions of PBSA as taking short-term risks to gain longer-term benefits. Words such as ‘opportunity’ often counterpoint rhetoric associated with ‘risk’ in ways designed to reassure developers and ensure buoyant markets (JLL, 2019; Colliers, 2019; Savills, 2019b). Hence the knowledge of the professional services company is important in promoting expertise (of comprehensively understanding the market), forecasting safety (of predicting safe passage if the ‘right’ course is followed), and cutting through jargon to appeal to the wider range of actors involved in PBSA development.

Commodification

Lippert and Steckle’s (2016) commodification dimension highlights how access to, and regulation of, PBSA are based upon a combination of financial and emotional transactions. In contrast to horizontal studentification, vertical studentification

invokes a developer-led niche lifestyle investment in off-campus apartment-style living. PBSA is commodified when based upon targeted financial transactions whereby students pay to secure access to a 'package' of private amenities and services within the commons of the PBSA and surrounding precincts and city. Knight Frank (2016) imply that commodification is closely associated with notions of quality and premium service in direct contrast with the private-rental sector. Achieving this requires effective and professional property management for PBSA consumers, which differentiates PBSA from residential options managed by landlords, rental agents, or family settings. Moreover, as international students must adjust to new urban and education cultures and encounters, PBSA bundles are enticing for their promised affordances, even if their cost is higher, relative to other provisions available.

A condo-isation approach therefore illuminates how increasingly-sophisticated hedonic demands of tailored PBSA discourses are shaped by commodification, juridification and financialisation. The PBSA market often uses clear commodification practices – claiming *premium* living experiences alongside promises of *quality* services – aimed at providing students the ability to choose the lifestyle they can (and/or want to) afford. Globally, students are encouraged to select accommodation packages that suit their requirements, expectations, and budgets for everyday life away from the family home or private rental markets. Indeed the competitive nature of Australian PBSA generates “facilities that regularly rival [those] associated with four star hotels” (JLL, 2019:24), and Savills (2018b:21) argue it is crucial for PBSA investors to get this right:

“Dealing with many hundreds of individual occupiers makes managing more costly and time consuming than a single-tenant office building, and poor management can mean reputational risk”.

Crucially, these assurances are not set by universities or developers but by professional service providers. This pushes responsibility onto PBSA investors and developers to invest in high quality, proactive property management services that, by mitigating issues, can retain sustainable, marketable products for consecutive years. Yet, a fine balance exists between promising a service and delivering it. Lippert and Steckle (2016) state that, while legal firms and professional services ‘sell’ their expert knowledge for a high price, property managers often receive relatively little reward – primarily in-keeping with their proliferation and minimal expertise – meaning more could be done to ensure that the PBSA product that is marketed to students is the one they will receive.

Moreover, in line with other international contexts, many university students are not permanent residents of Australian cities, with significant numbers moving in and out of cities annually and seasonally over the duration of their degrees. Of the 262,645 students studying at Australian metropolitan universities in 2016, only 8% originated from their respective metropolitan area, while 16% came from wider regional areas and 76% from overseas (Urbis, 2018). Hence, room preferences vary distinctively over time and culture (Urbis, 2019). The manifestation of Australian PBSA therefore blurs with neighbourhood design replicated across multiple Australian cities.

‘Urbanest’ – who entered the Australian market in 2008 and deliver purely off-campus and non-university aligned private facilities – exemplifies the crossover

language, direction and high-density of recent Australian PBSA as discussed above (Urbis, 2019) and expressed in distinctive geographies as discussed next.

PBSA studentification and condo-ism – exploring the intersections

While the previous section examined vertical studentification as constituting PBSA, we now draw in condo-ism that restructures urban life through three key drivers: demand, demographics and immigration/internationalisation (Rosen and Walks, 2013). This helps characterise the overlapping socio-spatial geographies of studentification as they disperse globally and warrant further inquiry.

Demand

Generating a self-perpetuating demand is essential to developer-led condo-ism. Such demand is exemplified in vertical studentification, and most evidently where PBSA is privately-provided and disconnected from university campuses and HEIs. The centralising and gentrification logics applied to student housing generates a climate of mobility and lifestyle dynamics that drives students' accommodation choices and the expected range where that accommodation might be located; whereby attractiveness is determined by propinquity to campus and services. Demand can often be aligned with accessibility, with commuting distances and access to social activities key factors in the successful placement of PBSA (Colliers, 2016).

A 'language of location' operates then as a mechanism for generating perceived demand in Australian cities; despite warnings of the 'rental stress' that manifests among students residing within the inner core of university cities (Urbis, 2018). Here, 'the student' is cast as a relatively-homogenous neoliberal agent in a global HE

market seeking idealised lifestyle opportunities proximate to housing and campus. Notably, vertical studentification in this form is a deliberate agentic exercise in housing choice subject to intensely-tailored marketing attached to the city more than HEIs and courses of study. In the Global North, vertical studentification is therefore an intense exemplar of a reciprocal relationship between post-industrial urban redevelopment (marked by tessellated condo skylines) and consumer demand for (increasingly) centralised housing with desirable attributes reflecting changing consumer tastes. Escalating these contributions towards student experiences inevitably marks vertical studentification out as a more sophisticated offering. Tensions inevitably exist between the building envelope and addressing wider neighbourhood issues arising from the density, nature, and an (often) incongruous aesthetic (Webb and Webber, 2017, Dredge and Coiacetto, 2011). Consequently, PBSA, like condo-ism, appears to add the value and vitality that is desirable for revitalising inner-city locations through the proliferation of studentified lifestyle spaces.

Demographics

This dimension considers specific age groups as likely to be drawn to living arrangements that offer the best “‘bundle’ of attributes” (Rosen and Walks, 2013:166, emphasis in original) – the availability of a variety of complimentary services and facilities that make everyday life more attractive. Indeed, real estate firms, like Knight Frank (2016: 5), recognise the importance of understanding how to make PBSA products as attractive as possible to a younger audience:

“[There exists a] need for local solutions to the issue of undersupply, to minimise an over reliance on less secure private rented sector tenancies, to

which students compete with young professionals, couples and families to secure residential accommodation close to campus, transport and amenity”.

This emphasises a noticeable desire to draw students away from more traditional forms of private house-sharing into PBSA to reduce competition with other demographic groups. Perhaps justified as altruism, it is more likely a tactic to ‘smooth out’ the city by avoiding community tensions experienced within classically studentified neighbourhoods (Hubbard, 2008).

Through a condo-ism lens, Liu et al. (2018) highlight a lack of scholarly and developer attention on the diversity and cultural participation in condos regarding social equity, which has belatedly been developed as part of a sustainability rhetoric in some developments (Sharam, 2019). This deficit is explicit in student accommodation design and marketing: the diversity of contemporary student demographics can be set in stark relief to the relatively homogeneous internalised offerings of PBSA (attached to the building – whether architectural or functionalist designs – and the modes of rental accommodation within). Commonly, whether accommodation is sparse or luxurious inside, contemporary marketing reinforces the premise that student tenants are a youthifying demographic (Moos, 2016).

Moos (2016) distinguishes the condo supply-side elements from the demand-side outcomes of youthification in cities. Vertical studentification extends this by linking these dimensions together. Here, the materiality of accommodation blocks themselves, combined with key marketing strategies, operate as mechanisms for drawing students into specific urban areas. Students are expected to seek a diverse range of features external to housing, like ‘access’ to the city and education, which becomes self-reinforcing with an intensified centralising location effect around

mobilities to education, employment, and recreation options that situate students in specific locations and not in others.

In the Australian context, developer and real estate decisions in PBSA provisioning appear to be driving 'demand' for central locations for student tenants, particularly in relation to mixed provisions in cities containing multiple institutions whereby equitable proximity to every institution becomes all but impossible. Critically, while increasing costs and paucity of available/affordable/suitable land to situate PBSA means it is increasingly pushed out into the periphery of cities (Smith and Hubbard, 2014), this may not necessarily be an impractical solution for students in Australia. With access to improved infrastructure, PBSA situated on the metropolitan fringe may offer cheaper alternatives that facilitates lifestyle amenities for students (Colliers, 2019). Yet, developers ought to be cautious of overstressing infrastructure investments to outer suburbs in case this exacerbates overlong and uncomfortable commutes.

Internationalisation:

We reframe Rosen and Walks' (2016) third element 'immigration' as internationalisation, whereby the cyclical mobilities of overseas students are perceived to influence a location's character (Collins, 2010). PBSA investors target wealthy international students, labelling them as youth-centric education immigrants capable of driving growth in vertical studentification (see: Knight Frank, 2016; Colliers, 2019). This focus on the non-permanent and seasonal residents of cities certainly appears to characterise internationalisation as 'good' for PBSA growth. Crucially, PBSA discourses refer to growth as supported by the premium

international students are prepared to pay for their accommodation – specifically in relation to the facilities made available to them (JLL, 2017).

Yet, more than simply driving the market, internationalisation shapes the development and sustainability of ethnic and cultural student and graduate enclaves within vertically-studentified cities. Echoed in the condo-ism literature, immigration and globalisation growth feeds directly into the condo market, thus improving the capacity for greater diversity and cultural mixing. As Rosen and Walks (2015:304) state: “immigration drives housing”, meaning the flows of human and economic capital into cities produce the condo as the de-facto response to affordable housing for newcomers in some cities. Importantly though, in terms of vertical studentification, immigration and internationalisation are concerned with impermanence as students progressively live and study *between* global cities. Yet, whereas students often desire discrete encapsulated experiences, such residential temporalities are simultaneously distinct from wider global condo-ism while opening up possibilities for transformative shifts in how graduates are likely to live through experimental and avant-garde models of condo-style housing beyond student-only PBSA.

Foundations for interrogating Australian vertical studentification

This condo-ism/condo-isation framework sets a vital foundation for considering the darker side of PBSA provisioning in this burgeoning Australian market. Beyond the consumer-driven dimensions of vertical studentification, a nascent Australian literature addressing international students is emerging within wider public discourses of ‘education tourism’ (Department of Infrastructure and Transport, 2013) and housing. Agendas exist to improve housing experiences for vulnerable and

struggling populations; and that aspire to social justice, community (Leshinsky and Mouat, 2015), and diversity (Liu et al., 2018). Moreover, this literature emphasises the negative elements in relation to student subsets (Ruming and Dowling, 2017), or wider issues such as stigmatisation, stereotyping, and vulnerabilities that manifest in tenuous accommodation (Fincher and Shaw 2009; Gurran et al., 2019) extending to outright exploitation (UNSW Human Rights Clinic, 2019) and issues affecting wellbeing (Obeng-Oboom, 2012, Ryan et al., 2016).

Such scholarly and media discourses include perspectives that counter the desirability of (student) immigration to Australia based on the impact on private rental accommodation in an already-tight accommodation market, and contest common refrains by advocates and Federal policy supporting greater student numbers (Birrell, 2019; Kerstens and Pojani, 2018). Despite rising scholarly activism and engagement with housing residents and activists generally, few focus on international student protest and agency (see: Sebastian, 2009 for a notable exception). This highlights another shortcoming in the Australian student housing and integration scholarship.

This marked scholarly blindspot in Australia is reinforced by the heightened attention to the appeal and expansion of Australian PBSA housing in global developer literature and criticisms in the media. Consistent with global media (Kinton et al., 2018), Australian media reports tend to be pejorative single snapshots or story trails; but also include 'press release'-style pieces by university/developer partnerships designed to showcase their new-build PBSA developments. Examples include the as-yet-unapproved SA8 in Canberra. Due for 2021, the Australian National University proposes an 'intimate student community' encompassing views of Lake Burley Griffin and Black Mountain set to house almost 900 students (Foden, 2019).

Other independent and/or multi stakeholder projects include the ‘Perth Education City’ project – a 2016 joint strategic initiative of the Western Australian Higher Education Council consisting of the Minister for Education and all five Western Australian universities’ Vice-Chancellors. This comprised Stirling Hall – Perth’s first off-campus PBSA in the CBD – that opened in 2019, with more in the pipeline (Stirling Capital, 2016).

So, in aligning vertical studentification with traditional ‘town’ and ‘gown’ (Hubbard, 2008) or policy-driven (Sage et al., 2013) studentification debates we identify unique Australia-centric conditions that problematise vertical studentification as an urban revitalising phenomenon. Concerns exist of lacking systemic Australian-based critical attention to PBSA development of itself, let alone as a geography of global capitalism transforming land (Sassen, 2015), and the implications for planning in postcolonial settings (Porter, 2006; 2016). One pressing media PBSA example that powerfully exemplifies this is Pemulwuy, a large-scale urban renewal project development in Sydney’s Redfern area named ‘The Block’. As Jenkins (2019:np) suggests, “[t]he vacant land was the first and largest urban land rights claim by Indigenous people in Australia”. Amongst other complex conditions on this unique Aboriginal suburb in inner Sydney, PBSA is a pivotal and controversial inclusion in the three-precinct development near the University of Sydney. Notably, successive development applications reveal the PBSA precinct shifted from six stories to 16 and ultimately 24 stories; quadrupling student housing provision to more than 500 students (Visentin, 2017). Staging the PBSA first was tactically intended to secure independent funding for the whole development, effectively cross-subsidising low-income housing. Final plans were approved in March 2019 guaranteeing the “tower would provide public benefit due to the provision of 110 subsidised beds to be made

available to Aboriginal and Torres Straight [sic] Islander students, in addition to 62 affordable housing dwellings to be delivered by the applicant as part of the wider renewal of the area” (Architecture Australia 2019:np).

More than NIMBYism and the unpopularity of high-rise housing developments generally in Australia, Porter (2006:383) reminds us that such developments “[...] highlight the further theoretical and practical work to be done to fully realise the complexities of planning in (post)colonial settings” and beyond. This includes asking: who benefits from such urban renaissance (Porter and Shaw, 2009), bio-political questions around financialising lives in speculative housing, international education migration, and: “postcolonial approach[es] to responsibility and care” (Madge et al, 2009:35) of international students.

Fincher et al. (2009) mark a significant turn where an Australian G8 university (University of Melbourne) and state capital city local government (City of Melbourne) explicitly recognised the challenges of PBSA and international students. This collaboration systematically examined the physical, social and organisational dimensions of PBSA and studentification to expose inequalities within access, community and sense of place. This unique geographic analysis presents a landmark study for Australia. Most frequently – in contrast to other international studentification literature that prioritises ‘the student’ and their accommodation provisions within cities – Australian housing literature focusses on metropolitan housing shortages attending to general immigration and equity of which ‘international students’ are subsumed (Nethercote, 2019). It is only since 2019 that a Federally-funded multi-year ARC Discovery project with lead researchers from University of Technology Sydney (UTS), University of Sydney and Macquarie University has

begun exploring the precarious housing circumstances of international students in the private rental sector (UTS, 2018).

Conclusion

In conclusion we have examined the burgeoning PBSA market in Australia to advocate vertical studentification as a new prism for critically interpreting global student housing networks. Drawing on condo-ism as a critical lens, we have explored the multiple ways in which PBSA has transformed the urban fabric of Australian cities in terms of planning processes and building design; the location of youthful demographics and the diverse internationalisation borne from attracting overseas students. Beyond the built form, the regulatory frameworks associated with condo-isation reveal new ways of understanding the financial, legal and commercial drivers of PBSA development – specifically relating to the governance of knowledge that – if conveyed correctly – can generate sustainable and equitable living arrangements for multiple cycles of students in Australia and beyond.

Exploring vertical studentification as a nexus between condo-ism, condo-isation and PBSA therefore warrants two corresponding understandings that are relevant to this new context. First, that contemporary vertical urbanism developments are increasingly 'condo-istic'. Second, that vertical studentification is a specific manifestation of condo-ism/condo-isation. In Australia, this arises auspiciously from an apartment boom, strategic rapid growth in HE and educational services as neoliberalised global economic commodity (Australian Government, 2016; Marshall, 2019), as well as cosmopolitan agendas for improving student experiences (Arkoudis et al, 2019) from developers and HEIs. Crucially though, Rosen and Walks (2013) argue that condo-ism operates within the classic 'urban utopia' models devised by

Jacobs in the 1960s, comprising heterogeneous, mixed-use living that connects the multiple strands of people's everyday lives – living, working/studying and socialising – together. Yet, where condo-ism and condo-isation seek to diversify, PBSA presents vertical studentification as a largely homogenising process. Like Rosen and Walks' (ibid:170) conceptualisation of the condo, global PBSA functions as the “anti-thesis of sprawl”, concentrating large numbers of (similar) students on compact, tall footprints, as well as utilising existing – and creating conditions for new – infrastructure.

As a contemporary global manifestation, PBSA – particularly on the vertical axis – therefore sits alongside the condo as a highly desirable construction type primarily because they both have capacities to stimulate infrastructural enhancement and demographic change in cities. Vertical studentification thus reveals that PBSA development does not simply *respond* to emerging national trends of international (and domestic) student mobility. Vertical studentification indeed *matters* to how contemporary cities function, witnessed in Australia through planners, developers and local authorities that utilise PBSA as genuine mechanisms for meeting housing supply targets, revitalising communities, developing cutting edge infrastructure and attracting highly skilled/educated workforces. This situates ‘the student’ – and relatedly PBSA – as central to the perceived success of contemporary university cities, specifically in relation to what might be termed the ‘apprentice consumer’ that is capable of optimising the city according to their tastes and desires. Our conceptualisation attests to a type of sophisticated, neoliberalised actor that is extremely appealing to planners, developers and investors, ensuring PBSA's role as an explicit and highly attractive marketing device through which to entice cyclical cohorts of young, mobile and unencumbered citizens.

Finally, from a specifically Australian angle, we assert that Australian cities and regional towns represent new frontiers of studentification through increased vertical PBSA developments. We acknowledge the rarity of studentification and PBSA as key terms in Australian literature; perhaps justifiably given their socio-spatial origins and specific terminology. However, the relative inattention by Australian scholarship is remarkable given the mushrooming international student boom in Australia and the commodification of student housing increasingly in high-rise form manifestly in Melbourne and Sydney as the two dominant destinations (Nethercote, 2019). Given the rising student numbers and development pipelines, a pressing priority exists for the Australian Government and HEIs to promote higher-quality housing and education outcomes. This shortcoming is further emphasised by the rich quantification and speculation in the parallel developer literature, which boasts colourful graphics and comparative quantitative statistics historically and around the world. Thus this research gains imperatives from these hurdles as they reveal both a blindspot *and* critical avenues for inquiry informing this paper and our wider research agenda.

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Table 1: Breakdown of student numbers, bedspaces and domestic penetration for the top six Australian capital cities (Source: JLL, 2019:12-19).

City	Total students	PBSA bedspaces	Total bedspaces	Percentage of PBSA bedspaces	Overseas market penetration rate	Domestic penetration rate	Total market penetration rate
Melbourne	208,026	16,171	26,668	60%	14.6%	4.6%	9%
Sydney	208,626	9,365	19,441	48%	15.1%	5.7%	9.3%
Brisbane	104,629	12,512	16,258	79%	34.2%	7.4%	15.5%
Adelaide	63,171	4,859	7,107	68%	21.7%	7.1%	11.3%
Perth	90,665	3,089	6,880	45%	15.9%	4.3%	7.6%
Canberra	32,658	4,399	9,389	47%	38.9%	21.9%	28.7%

