Author/s:
Morley, M;Pafka, E

Title:
“Density Done Well” in the Pursuit of 20-Minute Neighbourhoods: Navigating Fluid Discourses in Melbourne

Date:
2023

Citation:
Morley, M. & Pafka, E. (2023). “Density Done Well” in the Pursuit of 20-Minute Neighbourhoods: Navigating Fluid Discourses in Melbourne. Urban Policy and Research, 41 (2), pp.148-163. https://doi.org/10.1080/08111146.2023.2198550.

Persistent Link:
https://hdl.handle.net/11343/339455

Urban Policy and Research

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/cupr20

"Density Done Well" in the Pursuit of 20-Minute Neighbourhoods: Navigating Fluid Discourses in Melbourne

Merrick Morley & Elek Pafka

To cite this article: Merrick Morley & Elek Pafka (2023) "Density Done Well" in the Pursuit of 20-Minute Neighbourhoods: Navigating Fluid Discourses in Melbourne, Urban Policy and Research, 41:2, 148-163, DOI: 10.1080/08111146.2023.2198550

To link to this article: https://doi.org/10.1080/08111146.2023.2198550

Published online: 26 Apr 2023.

URBAN POLICY AND RESEARCH
2023, VOL. 41, NO. 2, 148–163
https://doi.org/10.1080/08111146.2023.2198550

Routledge
Taylor & Francis Group

"Density Done Well" in the Pursuit of 20-Minute Neighbourhoods: Navigating Fluid Discourses in Melbourne

Merrick Morley and Elek Pafka

Faculty of Architecture, Building and Planning, The University of Melbourne, Melbourne, Australia

ABSTRACT

The pursuit of 20-minute neighbourhoods has been recently combined with calls for "density done well". However, this catch-phrase is not well defined in planning policy and there is little understanding of what is being meant by it. This article investigates its meanings and how it may or may not contribute towards more liveable cities. Semi-structured interviews and analysis of participants' examples showed a multiplicity of nuanced and diverse meanings, the catch-phrase serving as an empty signifier. This reveals the pitfalls of masking divergent desires through linguistic tactics, but also the opportunities for mediating them through a less reductionist discourse.

摘要

近来, 对于 "20分钟社区" 的追求和关于 "良好密度" 的呼吁逐渐融合。然而, "良好密度" 这一流行语在规划政策中并未得到清晰界定, 同时人们对其也知之甚少。本文探究该流行语的含义, 并探讨其是否有助于创建更加宜居的城市。通过半结构化访谈和对参与者案例的分析, 本文厘清了 "良好密度" 基于微妙差异的多元内涵——这一流行语在很大程度上只是一个 "空泛的文字符号"。这一现象既揭示了政策实践中通过语言技巧掩盖差异价值追求所造成的威胁, 也提示了通过较少的还原主义话语来协调多元价值追求的机会。

ARTICLE HISTORY
Received 4 April 2022
Accepted 30 March 2023

KEYWORDS
Urban density; urban planning; urban design; strategic planning; density measures; neighbourhood; Melbourne

1. Introduction

Compact city policies have been a focus of metropolitan planning in Australia and internationally for more than three decades (Hurley *et al.* 2017), yet Australian cities have some of the lowest densities globally (Pafka 2022). These visions are challenged by urban development frameworks, physical structures and policy mechanisms (Gleeson *et al.* 2012). Over the past decade the phrase "density done well" has been included in Australian planning policy, responding to calls for better development (The Committee for Sydney 2016; London 2016; Byrne 2017; Jewell 2017; Creating Communities 2020; RPS Group 2020) and joining a trend of compact city policies that aim to ameliorate social, economic and environmental problems (Ng 2010). The phrase's proponents argue that increased urban *density* can converge with increased liveability, as long it is *done well* (Toderian 2012). This responds to decades of contestation of the benefits of higher urban densities (Lewis 1999; Cook *et al.* 2013; Hurley *et al.* 2017). Recently, the Victorian State Government has included this phrase in their "20-Minute Neighbourhoods" policy, with an overarching aim of "creating a

CONTACT Merrick Morley merrick.morley@unimelb.edu.au Melbourne School of Design, Masson Road, The University of Melbourne, Victoria, 3010, Australia

This article has been corrected with minor changes. These changes do not impact the academic content of the article.

more liveable Melbourne" (DELWP 2019, p. 1). Density done well, however, is not clearly defined beyond vague reference to mixed land-uses and social infrastructure. Furthermore, this policy is now being used in the 90 km long Suburban Rail Loop project (State Government of Victoria 2021). This article explores this gap by asking the questions: *how is "density done well" defined by planning professionals? and, how can it contribute to 20-minute neighbourhood policies to create more liveable cities?* A case study of metropolitan Melbourne was undertaken, incorporating semi-structured interviews with planners and related professionals familiar with the phrase, as well as physical density analysis of "density done well" examples provided by interviewees.

The article proceeds by reviewing the literature on urban density measures, perceptions of urban density and planning policy frameworks in Melbourne, before describing the recent rise of "density done well" in Australian planning discourse. We then outline the methodology for interviewing planning professionals and the associated findings, revealing a mix of convergent and divergent views and a broad spectrum of examples of density done well. A discussion follows on the tensions stemming from these findings and the strategies that may help deliver more liveable cities: improving density literacy, use of multiple urban density measures, and broader and earlier participation in strategic planning.

1.1. Urban Density Measures

Urban density is a much confused and misused concept (Lynch 1981). *Measured densities* comprise various ratios, with the numerator being an urban entity (person, household, floor area) and the denominator being an area (lot, block, suburb or city). Definitions of areas can be *net* (private land only) or *gross* (including public space). The use of density measures has been aligned with the emergence of the urban planning profession in the nineteenth century (Dodson and Gleeson 2007). From three features – enumeration of population through statistical and social surveys, growth of public health and safety legislation and a desire to arrange lots at a size that the poor and working class could afford – a loose "density regime" emerged, providing the impetus to order and plan the metropolis (Dodson and Gleeson 2007).

Dwelling density, the number of dwellings per hectare, was the first density codification to become widespread in planning, and continues to be broadly used in Australia (Griffiths 2009). It was included in Melbourne's first Metropolitan Planning Scheme (1954) and is used by the Growth Areas Authority (2009), now the Victorian Planning Authority (VPA), in the *Precinct Structure Planning Guidelines* for growth areas (DELWP 2017). Australian post-war housing reconstruction efforts based "desirable" dwelling densities on pseudoscientific arguments about adequate sunlight (Dodson and Gleeson 2007, p. 7). While dwelling density is often believed to be a rigorous tool, there are significant criticisms for its application, including the susceptibility of this measure to be appropriated, obscured and misunderstood by planners, policy makers, politicians and scholars, particularly because of changing dwelling and household sizes across history and various urban areas of the metropolis (Pafka 2013). Dwelling density may be the most popular urban density measure because it is ostensibly easy to understand and express in communication (Churchman 1999), but the implications of using such a measure is, at best, uncertain and at worst, counter-productive to planning policy and development in Melbourne (Dodson and Gleeson 2007).

A recurring critique focuses on the use of municipal reference areas, as density measures are distorted by large areas of unused land (Fooks 1946). Dwelling types – detached, row, high-rise – are shown to be associated with dwelling density ranges, but there are significant overlaps (Alexander 1993). Density targets by urban theorists in the last two centuries, show a divergence of views on what constitutes desirable dwelling densities, in part because of using reference areas of different scales (Pafka 2022).

Efforts have been made to redress applications of density measures in planning (Churchman 1999; Dodson and Gleeson 2007; Boyko and Cooper 2011). Commonly, the argument for change is that the application of density codes alone is insufficient to achieve the targeted social, economic

and environmental goals. Floor Area Ratio (FAR), also known as Plot Ratio or Floor Space Ratio (FSR), is a more precise measure of building density. It is linked to floorspace yields, but will not create conditions for urban amenity by itself. While FAR presents several benefits, it is argued that we need to find "more complex and complete" ways of measuring urban form, including qualitative methods (Sim 2019, pp. 212–222).

Other research has advanced an "anti-reductionist" approach to urban density that focuses on the dynamic relationships between people, buildings, open spaces, scales and intensities (Dovey and Pafka 2014, p. 75). In such approaches, density is part of a larger assemblage, a series of spatial relations that are contingent on each other. Streetlife intensities are conceptualised here as the synergistic outcomes from material densities (people, buildings, open spaces) and are resistant to quantitative reduction. This approach challenges planning frameworks that apply reductive zoning controls with embedded density measures to achieve liveability objectives. While there is a need to "raise the standard of urban density literacy" by understanding the emergent outcomes between material densities (Dovey and Pafka 2018, p. 79), there also needs to be a way for planning policy to incorporate these ideas to effectively contribute to change in neighbourhoods.

Urban density measures, at multiple scales, are often part of quantitative approaches to analyse healthy and liveable cities (Lowe *et al.* 2013; Arundel *et al.* 2017). This work has influenced many of the themes and goals within Melbourne's 20-Minute Neighbourhood policy, but there is a gap as to how the different domains and infrastructure interrelate at a fine-grain scale. Indeed, there is a lack of place-specific indicators and encourages a "one-size fits all" solution to Melbourne's urban liveability (Wolfe and Haas, 2021, p. 23).

1.2. Perceptions of Urban Density in Melbourne

While it is beyond the scope of this paper to extensively detail the history of socio-cultural and political ideologies associated with urban density preferences (see for example Dodson and Gleeson 2007), it is nonetheless pertinent to include key ideas that have shaped these debates. Since the colonisation of Aboriginal land and establishment of Melbourne in the 1830s, perceptions of urban densities have been mixed and problematic, with several key inflection points. The initial layout of Melbourne streets was based on the miasma theory that diseases were caused by noxious vapours, and that wide streets permitted adequate ventilation, while minimum lot sizes ostensibly prevented slum developments and overcrowding (Lewis 1999). Improving public health remained a catch-cry for those promoting lower dwelling densities in the second half of the nineteenth century (Ross 2011).

Howard's *Garden Cities of To-morrow* (1902) was an influential planning vision that led to low-density expansion. The newly-formed *density regime* would also be influential here for the same reasons. From this time until the 1960s the pursuit of anything but apartments and alternative tenure systems was shared by most city stakeholders (Dodson and Gleeson 2007). Notable exceptions occur – experimentation of new-build private suites for the wealthy (Butler-Bowdon and Pickett 2007), transformation of mansions into apartments (Boyd 1987), the "slum" reclamation efforts led by Barnett (Howe 1988), and the backlash from politicians and modernist designers (Lewis 1999; Butler-Bowdon and Pickett 2007) – but these did not convince Melbourne's broader population of density change through alternative housing choices.

What, then, changed in community perceptions of density in the 1960s? In Melbourne it was a combination of mounting pressure to stop development on the urban fringes (Melbourne Metropolitan Board of Works 1954), government review of minimum lot sizes (Hurley *et al.* 2017), and the introduction of the *Strata Titles Act 1967*. The latter facilitated easier ownership of apartments and commenced the flow of investment capital into residential development (Lewis 1999). Much of this postbellum multi-unit development followed modernist typologies of high-rise flats and "mid-rise" 2–3 storey "six-pack" apartments. While six-packs were of highly diverse designs and qualities, the type has been widely stigmatised (Townsend and Pert 2020).

In recent decades, the overwhelming imperative to lower carbon emissions, foster sustainability and resilience and ameliorate social inequities has prompted action to increase urban densities (Goodman *et al.* 2016). But there has also been continued scepticism (see Grodach and Limb 2020). Dovey *et al.* (2009) detail this in Camberwell, a more affluent suburb of Melbourne, where residents present paradoxical arguments for maintaining particular built-form and "neighbourhood character", concomitantly opposing increased urban densities. These views continue today in Melbourne's inner-suburbs, prolonged by the backlash of community groups such as "Save Our Suburbs" who formed initially to respond to changes made by the state government in the 1990s to facilitate streamlining of planning approvals, including provision for larger developments (Lewis 1999; Rowley 2017). Where these views are prevalently held may correlate with the existing communities' affluence and high property prices (Taylor 2013).

There are clear indications that there has been a major shift in attitudes towards higher density housing, with a 2016 survey indicating that a majority of Melbourne's inner- and middle- suburb residents preferring medium and high density dwelling as long is close to public transport (Newton *et al.* 2017). Recently, Infrastructure Victoria held a two-stage workshop with residents from Footscray, Camberwell and Heidelberg, asking them about the meanings and purposes of "density done well" (RPS Group 2020). Themes that were shared between the groups included quality urban design, accessible public transport, housing mix/affordability, pedestrian friendly, inclusivity, safety and mix of land-uses. The undersupply of different housing mix is also observed by Kelly *et al.* (2011), who detail shortfalls of higher density housing within the middle-ring suburbs. It appears a social shift is occurring with more Melburnians desiring a lifestyle that includes more neighbours nearby, provided it is density done well.

1.3. Planning Policy Frameworks in Melbourne

It is remarkable that the same urban density issues in Melbourne's first adopted metropolitan-wide planning strategy in 1954 continue in the latest iteration from 2017. Urban expansion is a pertinent example:

> Unless some attempt is thus made to regulate the outward expansion of the city, the demand for the amenities of everyday life, to which the citizen considers himself entitled, may grow beyond the capacity of the many public authorities. (Melbourne Metropolitan Board of Works 1954, pp. 21–22)

> It is unsustainable to keep expanding Melbourne's outer-urban growth areas. If the city continues to expand, the natural environment will be impacted, commute times to employment and services will grow longer, and socioeconomic disparities across the city will increase. (DELWP 2017, p. 45)

In 1954, the justification for curbing urban expansion was primarily economic, while in 2017 it brought social and environmental concerns to the fore. Between the timing of these two strategies, profound social, economic, political, technological and environmental forces have shaped Melbourne – yet incremental urban expansion has continued. Aside from socio-cultural and political ideologies that inform policies (Shelton 2012), urban densities can be manipulated by forces beyond the remit of planning policy frameworks, and their influence to promote change is questionable (Rowley 2017). Metropolitan planning schemes can be seen as "over-neat … however well intended" and can have little impact on the *actual* development of cities (Forster 2006, p. 180). This may be seen as a failure of planning policy implementation, but there is something else to consider here: planning is a wicked problem (Rittel and Webber 1973). Many of these problems indicate a wicked problem, and we would like to build on this work, connecting it directly to urban density issues.

Urban densities in Melbourne are currently mediated through neoliberal governance – the rise of markets as hegemonic voices in planning policy frameworks (Dovey 2005; Purcell 2009) – incentivising opportunities for private economic gains, but coming at the cost of long-term social, economic and environmental ones. This explains why removing "red-tape" is a common goal in

planning policy (Ruming and Goodman 2016) and has now led to what Gleeson *et al.* (2012) describe as *urban form* and *urban structure* planning deficits. So, while development is being increasingly led by private markets, the way it is occurring is exacerbating "overcentralisation of employment, civic opportunity and public investment and continuing haphazard dispersal of housing, commercial activity and motorised travel" (Gleeson *et al.* 2012, p. 134).

Mares (2018) explores this phenomenon through the lens of housing, revealing impacts on urban densities across Melbourne. The chapter titles "The Towering Inner City", "The Missing Middle" and "The Outer-Suburban Spread" reflect urban density trends over the past decades. The most-inner areas of the metropolis are densifying considerably, while the middle-ring suburbs have been stagnant or faced hodgepodge development (Buxton and Goodman 2014), and new growth areas continue to be built at very low densities. Arundel *et al.* (2017) found only 21% of Melbourne's suburbs met the "residential-net" target of 15 dw/ha specified by the Melbourne 2030 metropolitan strategy – intended as an increase from the previous target of 10 dw/ha, yet without a clear justification. Boulange *et al.* (2017) argue this target is insufficient to achieve walkability and other liveability indicators. Walkability, however, cannot be reduced to a simple list of properties (Dovey and Pafka 2020): rather it is the relationships *between* the urban elements that make streetlife intensity, or "density without intensity" (Dovey and Symons 2014).

More importantly, perhaps, are perceptions of the Victorian Planning System under neoliberal governance, which is revealed in terms of urban densities. While planning policy objectives are challenged by the way it is structured (Rowley 2017), weakened by the adjudication powers of the Victorian Civil and Administrative Tribunal (VCAT) that is the final arbiter in about one in ten planning applications, and an even higher rate in the inner city (Woodcock *et al.* 2011), there are other activities to consider. Planning is a relational process between individuals, communities, companies and government, yet there are signs that "closed-circuit" decision making is occurring (Legacy *et al.* 2014), limiting the avenues for input, negotiation and contestation. March (2012, p. 105) provides a vivid analysis of this process along the inclusion-exclusion and decisive-indecisive nexus, stating it is a "plain truth" that citizen interaction with the Victorian planning system is oppositional, although this could be expanded to include developers, planners, architects and other stakeholders. Higher (or lower) urban densities may symbolise these processes and outcomes that city dwellers do not want in their neighbourhoods. This process of planning and development therefore may be troubled by what Purcell (2009, pp. 144–145) calls "democratic deficits", a reification of capital, market and corporation influence that disempowers people to set "the agenda for their local area" (see also Woodcock *et al.* 2011). But it can also lead to more locally-contextual policies such as "neighbourhood character" that are useful for maintaining built-form and are bound up in social norms of what a neighbourhood is to remain as (Lewis 1999; Dovey *et al.* 2009). Paradoxically, this prioritisation of the local is not necessarily socially just or democratic as there is nothing inherently "good" about the local scale (Purcell 2009, p. 1924). Depending on the spatial and social scale, "local control could produce both just and unjust outcomes" (p. 1935) and urban densities are a material expression of this.

1.4. The Origins and Proliferation of "Density Done Well"

Canadian planner Brent Toderian has spent a decade using the phrase "density done well", including public-speaking events in Australia in 2013, 2014, 2017, 2019 and 2021. He argues that it responds to the "lazy polarization of discussions about density" that divided views into two ends of the for-against continuum, and instead posits "we can have our cake and eat it too" with increased urban densities and increased liveability, as long as it is *density done well* (Toderian 2012). Central to this theory are three overarching components (Toderian 2013): (1) aligning land-uses and how people get around; (2) consistently-high urban design quality and (3) provision

of amenities. More recently, Toderian proclaimed that the term NIMBY (not in my backyard) is misunderstood: "sometimes it's a reasonable point!" (Roberts 2019). Rather, we should be listening to these individuals, while amending "the culture, the structure, the capacity, the training, or the tools" to demonstrate that higher urban densities don't necessarily mean lower qualities of life (Roberts 2019). It appears that density done well has moved from urban density outcomes to include facilitating processes as well.

The uptake of this work is being seen across Australia, with the most populous states of New South Wales, Queensland and Victoria incorporating "density done well" rhetoric into their planning policies, as well researchers adopting this phrase in their work (London 2016; Byrne 2017). While Toderian has promoted his version, it does not mean that others will understand or use the phrase in the same way. The literature suggests it has broadened beyond Toderian's definition, now including considerations for reduced car parking, operation of design review panels and intergenerational living (The Committee for Sydney 2016; London 2016; Byrne 2017; Jewell 2017; RPS Group 2020). It may be, therefore, that "density done well" is an empty signifier: a phrase that can take on a multiplicity of meanings according to its context and relationship with other terms (Roskamm 2012). Empty signifiers can be tendentially filled with meaning to appeal to a wider audience, limiting differences and seeking hegemony (MacKillop 2018). Toderian's discussions of density done well have broadened over the last decade; exploring whether density done well falls into this conceptual territory is critical to understanding how it can be used in 20-minute neighbourhood policies.

1.5. Melbourne

Melbourne is used as a case study to relate to the broader trends in compact city policies over Australian capital cities (Goodman *et al.* 2016) and other low-density cities around the globe, regardless of the specific discursive terminologies used. At the time of the 2021 Census Melbourne had a population of 4.9 million, of which the large majority (76%) lived in detached houses, like other state capitals (64%–84%). Apartment living was limited to 10% of the population, while in the other capital cities it ranged from 5% in Perth to 23% in Sydney.

Interviews were held in 2020 with ten local professionals, including seven planners working for the state (SP) or private company (PP), an urban designer (UD), a heritage activist (HA) and a developer (DE) who advocate for, or have knowledge of, "density done well". Participants were identified through the social media platforms Twitter and LinkedIn and snowball sampling. Participants had an average of 11 years of professional experience.

The interviews were split into two parts. Following a narrative approach that emphasises construction of conceptual meanings (Polkinghorne 1991; Sandelowski 1991), the first part was a discussion about the meanings of "density done well" and urban density in metropolitan contexts. This included "vignette questions" which presented credible situations about density done well issues and sought to increase reflectiveness of participants (Bryman 2012, p. 263). The second part asked participants to nominate examples of "density done well". These were then explored in relation to the various spatial qualities of the concept (Woodcock *et al.* 2015, p. 130). Participants were asked to reflect on the attributes and boundaries of these locations that make them "density done well". Google Maps and StreetView were used to assist participants. Then the densities of these urban areas were measured to investigate interconnections between ways the city is perceived and the actual built form. Information was sourced from aerial and street view imagery, and planning documents. To compare the cases, consistent 400 × 400-metre (16 hectares) satellite images were used as base maps, with the example of density done well highlighted. In neighbourhood examples, the entire 16 hectares are considered as it includes several streets and buildings giving an indication of the general characteristics of the area. The exception to this is a planned 50-hectare precinct, where planning documents were available for the entire site, including FAR and dwelling totals.

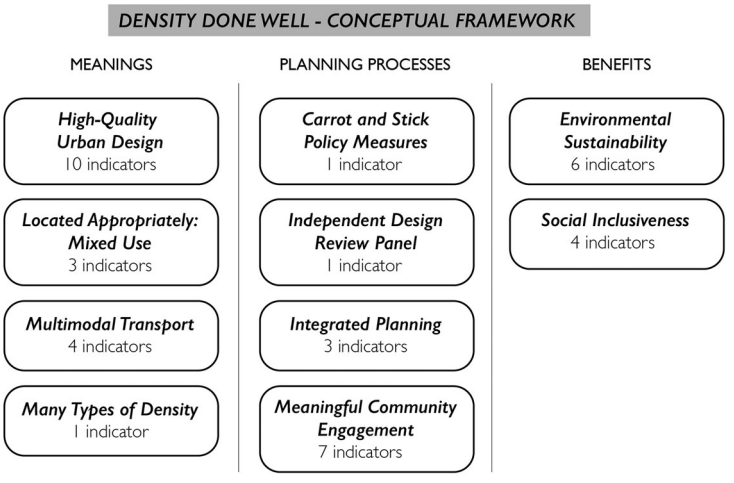

Figure 1. Framework for analysing the definition of density done well.

Density calculations were undertaken of FAR and dwelling densities, both measured net and gross. These were selected as they are most commonly used in planning codes (net measures), and are discussed in the urban studies (gross measures). This facilitates exploring convergences and divergences between meanings and material densities.

Interview data were analysed according to a framework on the definition of density done well. Ten themes were identified and arranged into the following: meanings, planning processes and benefits (Figure 1). Acting as an umbrella, each theme includes one or more indicators with the theme itself being an individual indicator too (Figure 2). Participant interviews were organised according to these indicators.

2. Findings

Analysis reveals responses were varied and urban density was linked or conflated with other processes and outcomes of the planning process. Similarities did, however, arise across both parts of the interview.

2.1. Meanings

When asked "what does density done well mean to you?" participants were quick to respond:

> Place and responding to place context. Acknowledging local character; marrying up between private and public realm; enabling growth while retaining identity (PP3);
>
> A beautiful walkable, cyclable street, interfacing small businesses, shop-top housing, trees, people coming and going, vibrancy, public parks and spaces that are utilised really well by the community, meeting spaces, togetherness and closeness brought together through the built form (PP2), and;
>
> A combination of public-facing and inward-facing parts of the development … or, from a community's perspective: "ahh, that's really nice! I could live there" (SP3).

A mix of perspectives arose, with some professionals holding a physically-deterministic view while others leaned towards residents' perceptions as the concept's meaning. Residents were all that mattered in one response: "if we want to make genuine places" then "we need more user focused [views] on what is good and what we could approve on before we make idealistic statements" (DE1).

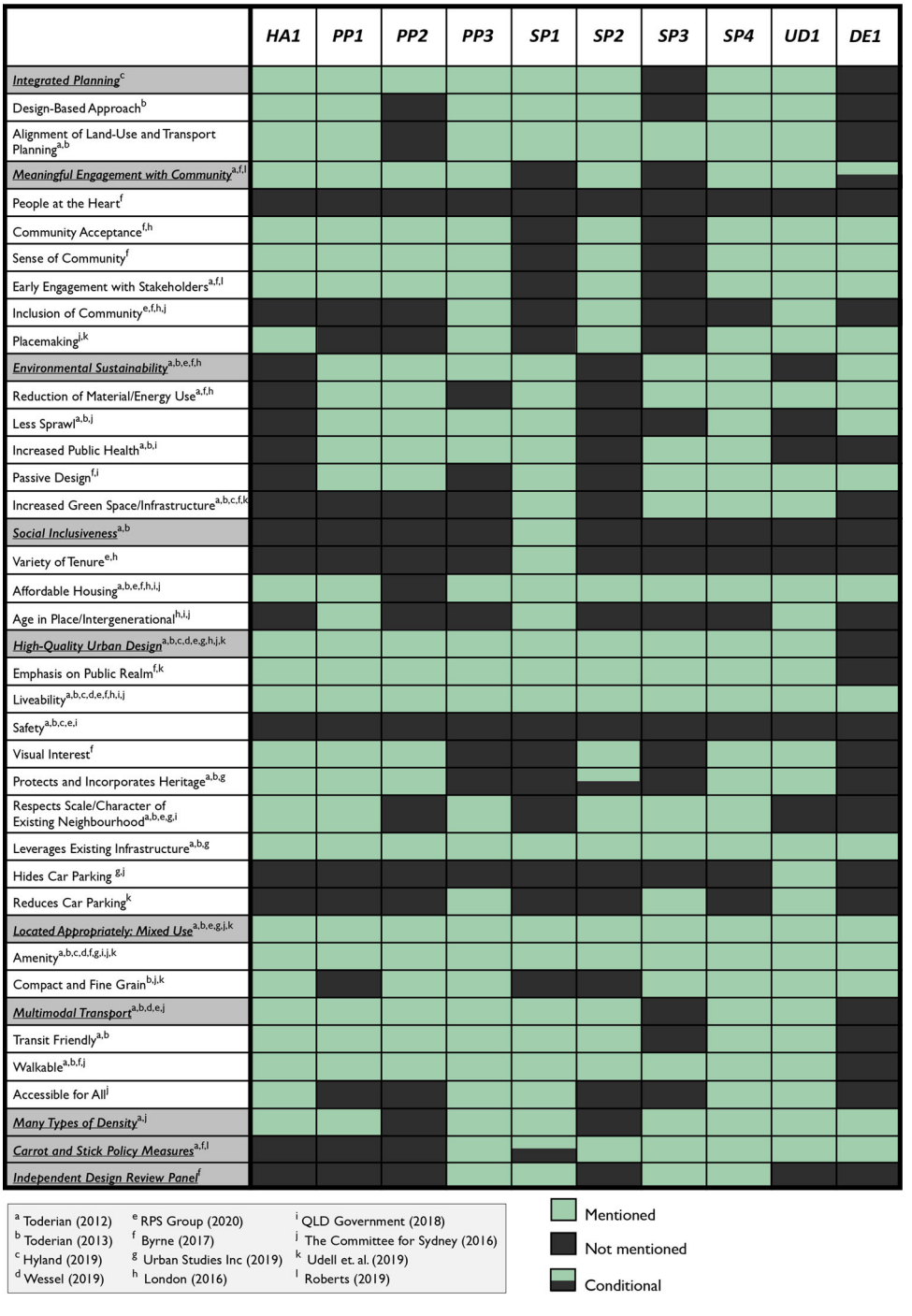

Figure 2. Analysis of participants' responses.

Discussing the details of what density done well means revealed more nuanced conceptualisations. This is reflected in Figure 2, which shows the diversity among responses. Note the vertical spans of grey, identifying whole themes that were not mentioned in a particular discussion, while

the same can be true for horizontal spans. "Safety" and "People at the Heart" were indicators not mentioned by any participant. "Liveability", "Leverages Existing Infrastructure", "Located Appropriately: Mixed Use" and "Amenity" were aspects all participants attributed to the meaning of density done well.

2.2. Measures

Urban density measures were seen as important to aspects of density done well:

> There is evidence out there about what density makes some of these services viable … Especially when it comes to things like retail or public transport, you need a certain level of density to support that (SP2);

> [Floor Area Ratio] gives a lot more clarity about the amount of density you can get in an area … (UD1).

For HA1, "The principles of good design are not actually rocket science, particularly when density is concerned" and the success of an urban realm is based on enabling sunlight, amenities and the absence of wind tunnelling.

For others, density measures can be a distraction or blight:

> I think there's a possibility that height and density side-track the conversation … There's various forms of density controls out there and I think they break down … when it comes to inner-city areas (PP3);

> You can achieve a metric, and it can still turn out pretty crap (PP2).

In all interviews, except for HA1 who noted only the benefits, the prevailing view was that urban density measures led to varying levels of success based on the location they are being used and the design of the measure itself. SP4, moreover, proposed the success of urban density measures comes back to effective and meaningful strategic planning, where "local communities … decide where they think places are best to accommodate more density, and then apply a zone to that" (SP4). Additionally, it is about analysing and evaluating the "quantitative mechanisms that sit within those zones" and making amendments according to any strategic changes (SP4).

2.3. Perceptions

The idea of public involvement in strategic planning is at odds with DE1 who had experienced emotional opposition to a low-carbon, relatively-dense proposal: "the politics of these issues are led by people who have a clear sense of what a place used to be but not the potential of what a place is to become". This leads to an us versus them situation with DE1, declaring that younger generations "need to get more engaged and take on the politics … at the moment we are not in control".

Despite this, public perceptions were seen as important in achieving density done well across most interviews. Many participants spoke about the issues and opportunities with community engagement in the planning policy, and this is reflected in Figure 2. Current engagement policies may be causing more harm than good: "You do wonder, when things get presented [to the public] at that last level, at the application level … people are put offside by the proposal. If you had the conversation with the community earlier on, and heard their opinions of what they want, it could lead to a different outcome" (SP2). SP4 shared a similar sentiment: "[when] everyone feels that they have had a chance to be heard … I would like to think … there's a lot more community comfort about what's proposed". These views are in contrast to DE1 who argues only certain perspectives help attain density done well.

Opinions of how the public actually perceives urban densities were mostly absent. PP1 reflected that "There's a nervousness and indeed a disappointment within society at large that a lot of mistakes have happened under this title of density and perhaps there's not a level of trust that the future or upcoming proposals or implementation will be any better". SP4 offered these thoughts: "You don't have a monolithic view [of urban density and development] within one particular

community: you have differences within communities as well", and "I think, after consultation, people started to understand that building in the right locations is a good thing".

For UD1, public perceptions of urban densities translated into how future densities are planned: "there will be a new renewal area and the local government will want to put as much density as possible in the newer areas so they can protect the existing suburbs … they don't want to upset their current voters by increasing density here, but because the people that will live here aren't real [yet], it doesn't matter". Again, only certain public perspectives seem to matter for density done well.

2.4. Planning

Public perceptions and community engagement were thought to directly relate to the success of some planning and development processes. For SP4, this leads to reduced time, money and effort at VCAT, which they believed was a win-win for all stakeholders. DE1 partially echoed this sentiment by arguing that VCAT fees drove up the final price of housing: "it doesn't serve anyone's interest". PP2, PP3 and SP2 also mentioned very similar ideas on this point. HA1, however, questioned the role of VCAT as an arbitrator of planning applications and argued that it made up rules as it goes along, concomitantly undermining community support for what could otherwise be "density done well".

Market and political influences in the planning system were mentioned frequently throughout interviews. For most, this was undermining the ability to achieve density done well: "I've experienced at state level what needs to happen to convince the minister to sign off on a policy … In terms of government and the whole rise of privatisation … you see government let the private sector come up with the ideas … property developers have a lot of sway; investors have a lot of sway" (PP2). Facilitating market forces helps to explain DE1's dismay over development quality: "One of our biggest frustrations is land-price speculation … for speculative builders, they're driven by a process of more 'let's build it as cheaply as we can to make the as much money as we possibly can'". PP3 saw multiple sides of this issue, whereby a "well-targeted" balance is needed between government and private entities to achieve density done well. SP4, however, felt this was not currently being achieved in the planning system: "It's become a rather cumbersome system which has become very political … there's a lot of political stuff going on, a lot of market stuff going on, which influences the statutory mechanisms" and prevents good urban densities.

Neighbourhood character was another common interview theme with high stakes: "there's a level of community concern about heritage in particular and retaining neighbourhood character … " (HA1). Others were ambivalent about the efficacy of this policy: "It's about our perceptions of neighbourhood character … it has a huge influence on decisions, […] with councillors being able to call in decisions made by a delegated officer and refusing something" (PP2), while SP2 declared "The character of the neighbourhood may be terrible. Just because all the blocks are aligned to that character and therefore it has some protection. It's a weird logic". As character is often tied to heritage and existing built form, therein lie many issues related to perceptions of urban densities.

Education of professionals was also a concern for achieving density done well:

> I think we do a pretty poor job in planning education about design and simple things such as reading a plan (SP4);
>
> Perhaps it's fundamentally the education that planners get is so broad—and as it should be—because there are so many things to consider. But there isn't enough … guidance of that skillset to give planners the confidence to deal with the density matter (PP1).

2.5. Examples

With the exception of DE1, who considered that "we are very quick to judge" developments as "outsiders", all participants provided a home, development, or neighbourhood (or combination of

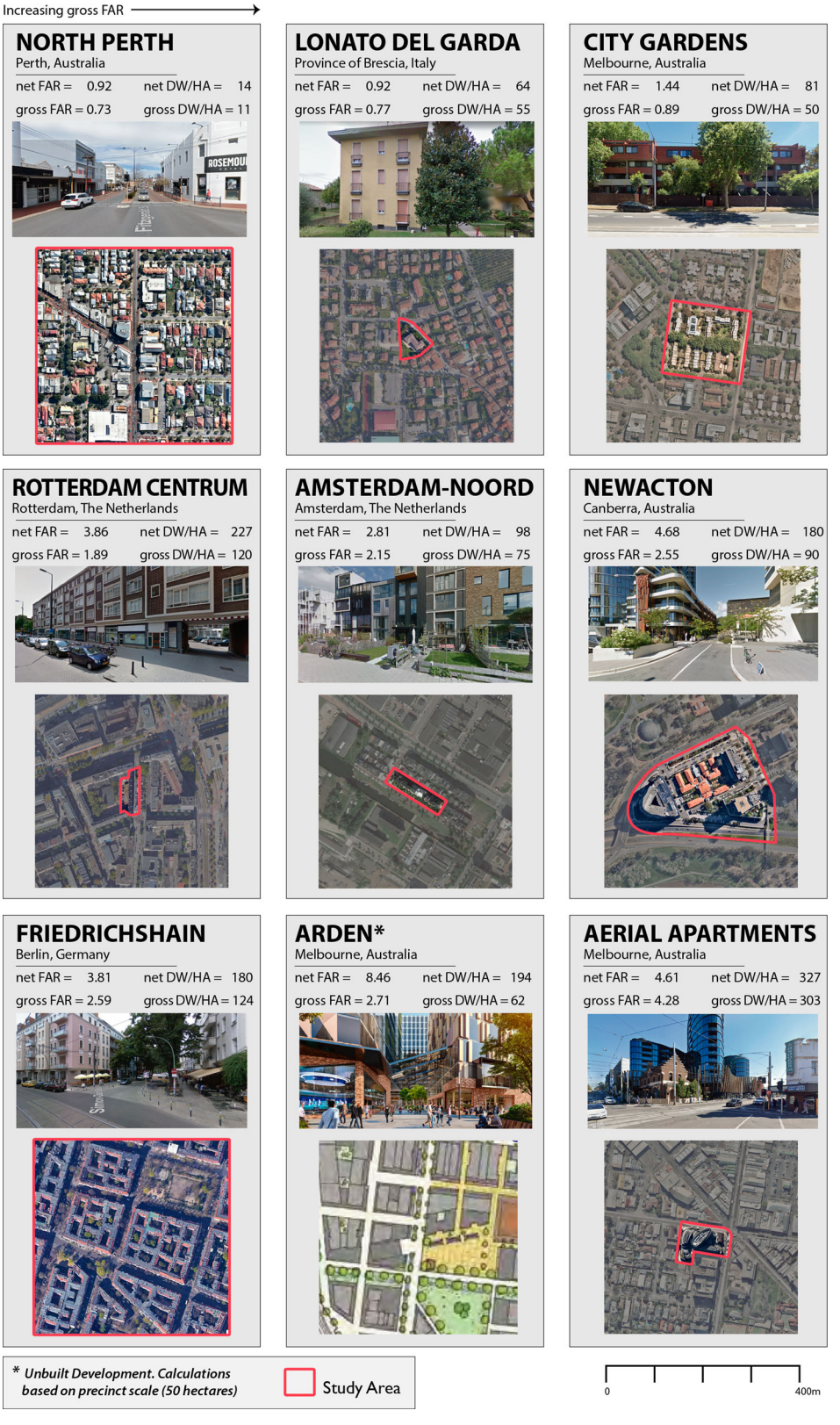

Figure 3. Participants' examples of "density done well" and their measured densities based on GoogleEarth.
Image sources: GoogleEarth and StreetView; VPA.

these) as an example. This is summarised above with areas ordered by increasing gross FAR (Figure 3).

As described by the participants, there is a wide variety of urban morphologies with building heights ranging from 1–25 storeys, although the majority are between 3–5 storeys. Functional mix ranges from monofunctional residential neighbourhoods to live-work-visit mixes. Building types include pavilion, row, perimeter block and tower with podium. Some are adjacent to parks, others are not; some are on leafy streets, others are not.

Building densities range widely from gross FAR of 0.7 to 4.3. This is a much broader range than the examples of "soft density" provided by Sim (2019) ranging from 0.8 to 1.9, or the examples of European urban tissues with gross FARs ranging from 1.5 to 2.6 (Eberle and Tröger 2015). Dwelling densities also vary widely from 11 to 300 dw/ha gross.

Five of the examples provided are from Australian cities, where the surrounding gross building densities are generally lower, and four examples are from European cities in which the surrounding densities are generally similar. While this may have affected perceptions, the range of building densities is defined by Australian examples.

3. Discussion

Interview responses revealed the multiplicity of understandings and meanings of "density done well". Commonalities among professionals included: functional mix, amenity, high-quality urban design, walkable infrastructure, integration of transport modes, leveraging existing infrastructure and a common understanding that it is not reducible to one kind of density. It can be conceptualised as an outcome, or a process, or both.

While the initial conceptual framework assisted in shaping questions and topics in the interviews, further themes had to be added. These include the purpose and mandate of planning tribunals, neighbourhood character and the education of planning professionals. These concepts mediate urban densities just as any of the initial themes of the conceptual framework, yet like the ideas throughout the literature review, they were not necessarily recognised or agreed upon by the professionals. Public participation and neighbourhood character were the most divisive topics; depending on who was asked, density done well was enabled or thwarted by these issues.

How do these common themes relate to the examples (Figure 3) that participants shared? Density done well is many types of density, but mixed land-use varies across all examples – from purely residential use in Lonato Del Garda to a fine-grain mix of uses in Friedrichshain – raising the question how much mix and what kind of mix is needed? The same question can be asked of other attributes, yet this line of questioning fails to acknowledge the multiplicity of connections between density, mix, access and perception. Instead, it would risk reducing "density done well" to a list of properties that does not capture the actual urban morphologies and associated histories. Understanding that the meaning of "density done well" can be connected to the hallway of a third-storey countryside apartment; the image of bespoke pot-plant landscaping surrounded by highways, or the promise of a sensitively-designed urban renewal project, shows that it is contingent on the dynamic relationships between properties and perceptions rather that the aggregation of the properties themselves. Examples of density done well, therefore, may contradict the *moderatum generalisations* discussed above.

Measures of dwelling densities and FAR are part of this conundrum, demonstrating the very broad range of material densities that can be seen as "done well". We measured both net densities that are controlled through planning codes, and gross densities that matter for urban design outcomes, including the 20-minute neighbourhood. Friedrichshain and Arden have similar net dwelling densities of 180 and 194 dw/ha, yet once public land is included, gross measures decrease to 124 and 62 dw/ha. FAR for these two examples reveal a similar trend, raising the point that both net and gross densities and the relationship between net and gross have to be considered relatively. This discrepancy is also linked to different functional mixes: one is being planned for forty thousand

jobs with public transport links (VPA 2020) while the other is a neighbourhood that has incrementally developed over the past century. These differences follow onto the properties of buildings, people, open spaces, scales, intensities, histories and perceptions, resulting in dwelling densities and FAR that can't by themselves demonstrate "density done well".

Like all urban planning questions, "density done well" is a wicked problem. Defining the phrase has proven difficult, and while the commonalities suggest something that we can theoretically build on, it is thrown into doubt by the messy multiplicity of urban density conceptualisations that links perceptions, materiality and time. Findings reveal that urban density often is linked or conflated with a litany of issues. This reinforces that "problem understanding and problem resolution are concomitant to each other" with a wicked problem, as "the formulation of a wicked problem *is* the problem" (Rittel and Webber 1973, p. 160). This leads to the next point: "density done well" is an *empty signifier* due to the complexities of defining and using density in planning. This means that the phrase can unite prevalent urban density issues; conversely, because density done well can be "many types of density", it allows vast scope for interpretation and, as it has been observed, can see disparate signifiers (built examples) used to represent the signified (density done well). This leaves the phrase open to conceptual and ideological fuzziness.

3.1. Prospects

Rittel and Webber (1973) argue that when tackling wicked problems, the aim is not to find a truth but to seek an improvement of the environment in which people live. So how can the public interest intent of "density done well" be better addressed within 20-minute neighbourhood policies to create more walkable and liveable cities? We suggest that strategies include improving density literacy, including the use of multiple urban density measures in planning policies, broader and earlier public participation in strategic planning and increased emphasis on spatial knowledge in education.

"Density done well" can be more useful if it is explicitly defined. While compact city and 20-minute neighbourhood policies aim to create "vibrant" places or streetlife intensity, vibrancy is elusive, emergent and linked to a multiplicity of urban attributes. The same can be said for liveability, which cannot be reduced to a list of properties. Rather than a "one-size-fits-all" definition, a better approach would build in flexibility and reflexive processes that are performance focused, be it low-carbon, socially just, or historically-sensitive neighbourhoods. Urban densities, furthermore, are inextricably linked to place and there is never an end-state for this alliance: place and identities are always changing, a state of becoming (Dovey 2009).

Urban density measures can be a way to *guide* outcomes: suburban homes with little else in terms of public amenity or high-rise apartments that are walkable with ample streetlife intensity. However, they do not *guarantee* these outcomes and this has to be acknowledged in planning policy. For Rittel and Webber (1973) this was a question of professional ethics, but it is also about people's long-term confidence with a neoliberal planning system that continues to prioritise capital over democratic processes and outcomes (Purcell 2009). Density measures may still be misused or abused due to their seemingly-value-free nature and ease of calculation but strict density controls can also be deployed to achieve the "softer" dimensions of density (Sim 2019). But this will require differentiated understanding between FAR that relates to material densities and dwelling densities that only relate to one part of the urban mix, between gross densities that relate to urban amenities and net densities that are controlled through planning instruments. It will also require continued raising of urban density literacy, to better correlate strategic planning objectives with statutory law influencing density outcomes. "Where knowledge claims are central to political discourse", sharing spatial knowledge in educational settings and beyond will help raise density literacy (Bell *et al.* 2021, p. 2).

Earlier and more substantial community engagement can lead to changes in how development proposals are perceived, or convey the benefits of diverse dwellings and land-use mix for a population. However, more engagement is not necessarily better engagement, astutely summarised by DE1's troubles with local opposition despite a socially and environmentally responsible proposal.

This affirms the position of Purcell (2006) that devolution of authority to local actors does not a priori equate to socially just outcomes.

Toderian argued "you should do everything you can to avoid helping the NIMBYs be right" (Roberts 2019) and this starts by acknowledging the faults of planning policy frameworks and practices (Gleeson *et al.* 2012). This is a conversation that is about much more than density, yet we may only start to see more liveable neighbourhoods once the public interests of environmental sustainability and social equity are elevated in urban density conversations and enforced in planning systems. Planners have good knowledge of cities at various spatial scales, yet we need to convey the idea that "you can have your cake and eat it too" with increased urban densities (Toderian 2012). But this will require also better understanding of the implications of various density controls, and how they may enable or constrain social and environmental outcomes.

The findings of this research re-affirm the drawbacks of reducing 20-minute neighbourhoods and planning in general to a series of properties, and that greater emphasis should be placed on anti-reductionist approaches of urban planning that consider relations *between* material and perceived densities over time, and in relation to functional mix and multi-modal access networks. While density done well may be seen by many as a convenient linguistic tactic that masks divergent desires, the problem is precisely the conflict avoidance that it enables. Rather, conflict, mediated through politeness and policies, is intrinsic to urbanity (Sendra and Sennett 2020). That includes planning codes that enable or constrain material densities and can accommodate the diverse desires of citizens. Such policies however will require an enhanced density literacy in professional education and public discourse, public participation and planning practice.

Acknowledgment

We thank Kim Dovey for the encouraging critique of an early version of the manuscript.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

ORCID

Merrick Morley http://orcid.org/0000-0003-3114-312X
Elek Pafka http://orcid.org/0000-0001-5095-4206

References

Alexander, E., 1993. Density measures: a review and analysis. *Journal of architectural and planning research*, 10 (3), 181–202.
Arundel, J., *et al.*, 2017. *Creating liveable cities in Australia: Mapping urban policy implementation and evidence-based national liveability indicators*. Melbourne: Centre for Urban Research (CUR) RMIT University.
Bell, S., *et al.*, 2021. Co-producing a community university knowledge strategy. *Frontiers in sustainability*, 2, 661572.
Boulange, C., *et al.*, 2017. Examining associations between urban design attributes and transport mode choice for walking, cycling, public transport and private motor vehicle trips. *Journal of transport & health*, 6, 155–166.
Boyd, R. 1987. *Australia's home*. Melbourne: Melbourne University Press.
Boyko, C.T., and Cooper, R., 2011. Clarifying and re-conceptualising density. *Progress in planning*, 76 (1), 1–61.
Bryman, A. 2012. *Social research methods*. Oxford: Oxford University Press.
Butler-Bowdon, C., and Pickett, C., 2007. *Homes in the sky: apartment living in Australia*. Melbourne: Melbourne University Press.
Buxton, M., and Goodman, R., 2014. The impact of planning 'reform' on the Victorian land use planning system. *Australian planner*, 51 (2), 132–140.
Byrne, J. 2017. *Density by design – can good design change the great Australian dream? Low carbon living CRC*. Sydney. Available from: https://densitybydesign.com.au.
Churchman, A., 1999. Disentangling the concept of density. *Journal of planning literature*, 13 (4), 389–411.

The Committee for Sydney. 2016. *Making great places: density done well*. Discussion paper, Sydney.
Cook, N., Taylor, E., and Hurley, J., 2013. At home with strategic planning. *Australian planner*, 50 (2), 130–137.
Creating Communities. 2020. *Urban density done well*. Perth. Available from: https://www.creatingcommunities.com.au/work/the-street-where-you-live-urban-density-done-well.
DELWP. 2017. *Plan Melbourne 2017–2050 metropolitan planning strategy*. Melbourne: State Government of Victoria.
DELWP. 2019. *20-Minute neighbourhoods: creating a more liveable Melbourne*. Melbourne.
Dodson, J., and Gleeson, B., 2007. *The use of density in Australian planning*. State of Australian cities conference, November, Adelaide.
Dovey, K., 2005. *Fluid city*. Sydney: UNSW Press.
Dovey, K., 2009. *Becoming places*. London: Routledge.
Dovey, K., and Pafka, E., 2014. The urban density assemblage: Modelling multiple measures. *Urban Design International*, 19 (1), 66–76.
Dovey, K., and Pafka, E., 2018. Densities. In: K. Dovey, E. Pafka and M. Ristic, eds. *Mapping Urbanities*. London: Routledge. 70—90.
Dovey, K., and Pafka, E., 2020. What is Walkability? The Urban DMA. *Urban Studies*, 57 (1), 93–108.
Dovey, K., and Symons, F., 2014. Density without intensity and what to do about it. *Australian planner*, 51 (1), 34–46.
Dovey, K., Woodcock, I., and Wood, S., 2009. Understanding neighbourhood character. *Australian planner*, 46 (3), 32–39.
Eberle, D., and Tröger, E., 2015. *Density & atmosphere*. Basel: Birkhäuser.
Fooks, E., 1946. *X-ray the city!: The density diagram: basis for urban planning*. Melbourne: Ministry of Post-War Reconstruction.
Forster, C., 2006. The challenge of change: Australian cities and urban planning in the new millennium. *Geographical research*, 44 (2), 173–182.
Gleeson, B., Dodson, J., and Spiller, M., 2012. Governance, metropolitan planning and city-building: the case for reform. *In*: R. Tomlinson, ed. *Australia's unintended cities*. Clayton: CSIRO, 117–133.
Goodman, R., Buxton, M., and Moloney, S., 2016. *Planning Melbourne: lessons for a sustainable city*. Clayton: CSIRO.
Griffiths, D. (2009). *Density targets: measuring everything except that which makes life worthwhile*. 10th International Cities Town Centres and Communities Society Conference, Deakin University Geelong.
Grodach, C., and Limb, M., 2020. Compact city reset: towards alternatives to market-driven density. *Urban policy and research*, 38 (4), 287–290.
Growth Areas Authority, 2009. *Precinct structure planning guidelines*. Melbourne: State Government of Victoria.
Howe, R., ed., 1988. *New houses for old: fifty years of public housing in Victoria 1938*–1988. Melbourne: Ministry of Housing and Construction.
Hurley, J., Taylor, E., and Dodson, J., 2017. Geting dense: why has urban consolidation been so difficult. *In*: N. Sipe and K. Vella, eds. *The Routledge handbook of Australian urban and regional planning*. London: Routledge, 123–135.
Jewell, C. 2017. *New Josh Byrne show to highlight density done well*. The Fifth Estate, 11 April. Available from: https://www.thefifthestate.com.au/innovation/residential-2/new-josh-byrne-show-to-highlight-density-done-well/.
Kelly, J.-F., Weidmann, B., and Walsh, M., 2011. *The housing we'd choose*. Melbourne: Grattan Institute.
Legacy, C., Gleeson, B., and Dodson, J., 2014. Implementation: getting our act together. *In*: C. Whitzman, B. Gleeson, and A. Sheko, eds. *Melbourne: what next? A discussion on creating a better future for Melbourne*. Melbourne: The University of Melbourne, 116–131.
Lewis, M., 1999. *Suburban Backlash: the battle for the world's most liveable city*. Melbourne: Bloomings Books.
London, G., 2016. *Density done well: what does it take?* Sydney: HIA Building Better Cities Summit.
Lowe, M., *et al.*, 2013. *Liveable, healthy, sustainable: what are the key indicators for Melbourne neighbourhoods?* Research Paper 1, Place, Health and Liveability Research Program, University of Melbourne.
Lynch, K., 1981. *A theory of good city form*. Cambridge: MIT Press.
MacKillop, E., 2018. How do empty signifiers lose credibility? *Critical policy studies*, 12 (2), 187–208.
March, A., 2012. *The democratic plan: analysis and diagnosis*. New York: Routledge.
Mares, P., 2018. *No place like home: repairing Australia's housing crisis*. Melbourne: Text Publishing.
Melbourne Metropolitan Board of Works. 1954. *Melbourne metropolitan planning scheme*.
Newton, P., Meyer, D., and Glackin, S., 2017. Becoming urban: exploring the transformative capacity for a suburban-to-urban transition in Australia's low-density cities. *Sustainability*, 9 (1718), 1–22.
Ng, E., ed., 2010. *Designing high-density cities for social and environmental sustainability*. London: Earthscan.
Pafka, E., 2013. *Nothing gained by only counting dwellings per hectare*. Sydney: State of Australian Cities Conference..
Pafka, E., 2022. Multi-scalar urban densities: from the metropolitan to the street level. *Urban Design International*, 27 (1), 53–63.
Polkinghorne, D.E., 1991. Narrative and self-concept. *Journal of narrative and life history*, 1 (2–3), 135–153.
Purcell, M., 2006. Urban democracy and the local trap. *Urban studies*, 43 (11), 1921–1941.
Purcell, M., 2009. Resisting neoliberalization: communicative planning or counter-hegemonic movements? *Planning theory*, 8 (2), 140–165.

Queensland Government. 2018. *Diversity and density done well competition document*. Brisbane.
Rittel, H., and Webber, M., 1973. Dilemmas in a general theory of planning. *Policy sciences*, 4 (2), 155–169.
Roberts, D. 2019. *Making cities more dense always sparks resistance – here's how to overcome it*. Vox Journalism, 30 January. Available from: https://www.vox.com/2017/6/20/15815490/toderian-nimbys.
Roskamm, N., 2012. *The concept of density*. GAM(08 dense cities: architecture for living closer together), pp. 130–141.
Ross, A., 2011. "Nothing gained by overcrowding": the history and politics of urban population control. *In*: *The New Blackwell companion to the city*. Oxford: Blackwell, 169–178.
Rowley, S., 2017. *The Victorian planning system*. Melbourne: Federation Press.
RPS Group. (2020). *Infrastructure Victoria 30-year strategy engagement report (stage one and two)*. Melbourne.
Ruming, K., and Goodman, R., 2016. Planning system reform and economic development: unpacking policy rhetoric and trajectories in Victoria and New South Wales. *Built environment*, 42 (1), 72–89.
Sandelowski, M., 1991. Telling stories: narrative approaches in qualitative research. *Image*, 23 (3), 161–166.
Sendra, P., and Sennett, R., 2020. *Designing disorder*. London: Verso.
Shelton, B., 2012. Adelaide's urban design: pendular swings in concepts and codes. *In*: S. Marshall, ed. *Urban coding and planning*. London: Routledge, 137–157.
Sim, D., 2019. *Soft city: building density for everyday life*. Washington: Island Press.
State Government of Victoria. 2021. *Suburban rail loop: more than a rail line*. November 11. Available from: https://bigbuild.vic.gov.au/projects/suburban-rail-loop.
Taylor, E.J., 2013. Do house values influence resistance to development? A spatial analysis of planning objection and appeals in Melbourne. *Urban policy and research*, 31 (1), 5–26.
Toderian, B. 2012. *Vancouver urban forum* [Video]. Youtube, July 5. Available from: https://www.youtube.com/watch?v=eRk93Wgdv1gandfeature=emb_title.
Toderian, B. 2013. Toderian: density done well. *Spacing Magazine, Store, and Blog Network*. Toronto, April 10. http://spacing.ca/national/2013/04/10/toderian-density-done-well/.
Townsend, C., and Pert, A., 2020. *"The worst disaster" ever to blight Melbourne's residential landscape.*The terms of habitation: Re-theorizing the architecture of housing conference, Israel.
Victorian Planning Authority (VPA). 2020. *Draft Arden structure plan*, June 2020. Melbourne.
Wolfe, C., and Haas, T., 2021. *Sustaining a city's culture and character: principles and best practices*. London: Rowman & Littlefield.
Woodcock, I., *et al.*, 2011. Speculation and resistance: constraints on compact city policy implementation in Melbourne. *Urban policy and research*, 29 (4), 343–362.
Woodcock, I., Wollan, S., and Dovey, K., 2015. Would you like a code with that? *In*: R. Lehinsky and C. Legacy, eds. *Instruments of planning*. London: Routledge, 125–141.