

Urban Geography



ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/rurb20

Density textures: the crowd, everyday life, and urban poverty in Manila

Colin McFarlane, Kristian Saguin & Kaloy Cunanan

To cite this article: Colin McFarlane, Kristian Saguin & Kaloy Cunanan (28 Sep 2024): Density textures: the crowd, everyday life, and urban poverty in Manila, Urban Geography, DOI: 10.1080/02723638.2024.2401715

To link to this article: https://doi.org/10.1080/02723638.2024.2401715

9	© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
	Published online: 28 Sep 2024.
	Submit your article to this journal ${\it \mathbb{G}}$
ılıl	Article views: 12
Q ¹	View related articles 🗗
CrossMark	View Crossmark data ☑







Density textures: the crowd, everyday life, and urban poverty in Manila

Colin McFarlane [©] ^a, Kristian Saguin ^b and Kaloy Cunanan ^b

^aDepartment of Geography, Durham University, Durham, UK; ^bDepartment of Geography, University of the Philippines, Quezon, Philippines

ABSTRACT

While there is a long and varied history of research on urban density, there is little work examining how high-density urbanism (HDU) is perceived and experienced amongst marginalized residents. Yet, paving attention to how residents understand density offers important insight into what density is and to how it matters for cities. Drawing on research in one of the world's densest and most unequal cities, Manila, we develop the concept of "density textures" to address this gap. We examine density textures through three key inter-related themes: negotiating space, the unruly crowd, and material substrates. We conclude with reflections for future research.

ARTICLE HISTORY

Received 13 June 2023 Accepted 13 August 2024

KEYWORDS

Density; crowds; urban theory; poverty; Manila

Introduction

Despite the long history of debate on density and what it does or does not offer cities, there is little research on how residents themselves perceive and experience high density. This paper develops the concept of "density textures" as one route to addressing this. We ask: how do people understand and relate to high-density urbanism? And what does understanding people's relations to high-density teach us about density's role in urban life? In doing so, we aim to advance understanding of density in Urban Studies.

We examine how residents on the urban economic margins understand, struggle with, respond to, and challenge densities of people and things. In order to capture the range of issues residents attach to high densities, we work with an expansive conception of density, including densities of people (in the home, street and neighborhood), densities "on the move" (on foot, or on public or private transit), and densities in public spaces in the neighborhood and beyond.

Our focus is on how high-density urbanism becomes a concern for residents, whether for good or bad. We began with the position that residents do not simply respond to density, they shape it discursively and materially as a lived process that is co-produced by people, urban form, materials, history, politics, economy, culture, and environment. Moreover, we sought to explore how residents relate to density in multiple ways, not just as an instrumental "problem" (e.g. congestion, pollution), but as a "solution" and "resource" too, and to how people might hold both these senses of high-density simultaneously (Chowdhury & McFarlane, 2022; Joiner et al., 2022).

Density emerges not as singular or fixed but as an ongoing, changing and multiple socially differentiated process, registering on bodies and lived experiences in all kinds of ways, ranging from fear and exhaustion to aspiration and security. From this position, density is less an urban abstraction that is "good" or "bad" for cities and is instead made and remade by residents in different ways over time, and residents often have clear ideas themselves about how density might be better configured. This includes how density connects to the larger political and economic processes of the city, for instance in relation to housing, economy, infrastructure, services, or security. Our focus on "density textures" provides a basis for stimulating a new research direction in Urban Studies in which dense urbanism is conceptualized not prior to or in spite of everyday urban life, but from the perceptions and experiences of urban life worlds.

The empirical context is a marginalized neighborhood in central Manila. Drawing on a small study in one neighborbood, our hope is to stimulate a larger discussion of how to develop place-based understandings of density based on the ways in which density is encountered and perceived. In the next section we describe the context and methodology. We go on to situate the research in debates on urban densities, describing our conceptualization of "density textures." We then examine density textures through three key inter-related themes that emerged in the research: negotiating space, the unruly crowd, and material substrates. We show that high-density is both a valued part of social and economic life and a set of hazards that generate differentiated forms of anxiety and concern, before considering implications for future research.

Hazards, poverty and density: the research context

Across East Asia in recent decades, high-density urbanism (HDU) has grown predominantly in the low and lower-middle income brackets, and many of those residents are living on under-serviced marginal land (World Bank, 2015). The East Asian urban population has grown faster than the growth in the provision of urban land, which creates challenges for delivering housing, services and infrastructure to urban majorities. These patterns are intensifying existing pressures in poorer neighborhoods, including the threat of demolition, and producing new inequalities (Brickell et al., 2018).

Metro Manila (hereafter "Manila"), one of the world's largest densest and most unequal cities, reflects this wider regional context. The city's density by number of people per km² has increased by 36% since 2000 and over half the population lives in dense low-income neighborhoods (Edelman, 2016; Kwak, 2015; Valencia, 2016). Built on an alluvial plain on the coast, many of Manila's poorest residents are vulnerable to flooding and associated health problems caused by inadequate housing, sanitation, and industrial waste, as well as absorbing the worst of the impact of typhoons or government evictions (Hodal, 2013). The hazards are as much political as they are ecological. For example, the ongoing Manila Bay Rehabilitation Program, flood control infrastructure, road development, and proposed reclamation projects along coastal Manila have intensified precarity (Alvarez & Cardenas, 2019; Saguin & Alvarez, 2022).

One of the densest areas in Manila, where these issues have been magnified, is the central district of Tondo, where the population density ranges from 72,200 to 91,637 people per km² (Boquet, 2015; Philippine Statistics Authority, 2016). Tondo is a densely settled coastal area along Manila Bay with a historically strong working-class urban identity. In the second half of the twentieth century, the district became a symbol of Manila's uneven urban growth and where the poorest neighborhoods proliferated amid ongoing waterfront development and reclamation projects. We focus here on a small research study that we conducted on Barangay 105 in northeast Tondo (barangays are the smallest administrative units in the Philippines). Located near the urban core at Manila North Harbour, Barangay 105 contains high residential population density and approximately 25,000 people (according to the 2020 census), a diverse economic profile, and proximity to waterways, infrastructure and transport development projects that reflects some of the broader urban transformations in the city (Jones, 2015; Reves, 2016; Sebag-Montefiore, 2015; The Purples Centre, 2016).

The barangay is bisected by a large and busy multi-lane highway which separates an older neighborhood from the reclaimed land where more recent urbanization has occurred. This latter area includes Happyland, a dense settlement built on the water's edge and known for its large urban recycling economy. Happyland and its neighboring areas in Barangay 105, including GK and Building, have seen waves of migration from the rest of the city and the country since the 1980s in particular. Residents have found work in the Port Area districts and surrounding economies, including waste recycling, market trading, and private transit (Reyes et al., 2020). Many of the poorest residents in Barangay 105 make a living informally by recycling waste, especially plastic (Zortea et al., 2019). As one NGO worker remarked to us, "all plastic gets recycled here, nothing is thrown away." Away from the main streets of Happyland, GK and Building are quieter, and share a similar urban form of dense, narrow lanes allowing for little light, with houses often packed into several storeys.

We established contact with the barangay local government and local NGOs in the area. The barangay office was especially helpful in introducing us to initial contacts, but we were careful not to become too associated with the office in case residents saw us as attached to the local government or to a political party. We, therefore, allowed the research to snowball through our initial contacts, and sought to identify a range of residents across age groups, socioeconomic position, and gender. In addition to interviewing fifteen residents, traders, tricycle drivers, barangay workers, and staff at NGOs, we had several informal conversations with residents, carried out participant observation, and analysed relevant secondary data on the neighborhood and wider Tondo area. In addition, two of the authors are longterm residents of the city and familiar with the area and some of the local organizations.

The interviews were carried out across Barangay 105 and the nearby large market area, Divisoria. Known for its wholesale stores and street and itinerant vendors that sell a wide range of low-priced products, Divisoria has long been a key site in the everyday mobilities of residents of Barangay 105, who make regular trips for work or shopping. It is a dense, sprawling and diverse collection of street stalls, vendors, and ageing post-war malls that cater mainly to lower incomes (Illy, 1986; McIntyre, 1955). The relationship between street vendors and the city government has changed over time, taking on varying modes from violent dispersal to negotiated tolerance (Illy, 1986; Recio, 2022).

We use the narratives we gathered from the research to illustrate the concept of density textures and to provide an empirical snapshot and opening for further research.

Given that Barangay 105 is a highly dense area of 25,000 people in an extremely diverse city of 25 million, our aim was not, obviously, to be comprehensive. Indeed, any study of the experience and perception of HDU in cities will inevitably fall short of capturing the range and complexity of human life and context. In an area of 25,000 people, then, what could we learn of substance from a research project that interviewed just a small number of people? Given that the focus here is on density, there is the temptation to argue that the number of people required must by necessity be large. While we are mindful of the inevitability of small samples in areas of thousands and even millions of people, we have sympathy with this argument. Clearly, positioning a small sample as representative of a totality would be to grossly overstate the data. However, it is also the case that small samples can provide insight into density, ways of understanding how people relate to it, and clues to larger conditions that can be "tested" and examined in future research. If we view a small sample as a provocation and entry point into a larger discussion about the nature of the pros and cons of density, showing for example that it might vary by social or spatial differences, then the data can potentially either destabilize what we assume to be the case about density, or open out the range of issues we want to "put on the table" of the debate on the density experience, or nuance themes that have emerged in other studies in the same or another place.

What matters here is that the work has served to challenge or widen our understanding of how density might be experienced and what it might come to mean to different people. In addition, if even in a small sample in a 25,000 population area we find that a particular set of positive or negative issues emerge as central, then it is reasonable to assume that it is unlikely to have emerged by chance, and that there is substance to that issue at least for some of the larger population. What we hope to show is that even with the relatively small group of different people we spoke to, there are significant differences that emerge, as well as some recurring concerns. We do not position these differences and concerns as representative of the neighborhood or city, but as provisional openings for how we might understand, research and conceptualize density, challenge singular accounts of what density "is," and inform a larger global conversation about urban density in research, policy and practice.

From "density solutionism" to "density textures"

Over the past two decades, a growing consensus has emerged across most of the urban world, including mainstream research, policy, and practice, that density is good for cities, and that densification should be incentivized in planning and policy (Pérez, 2020). Advocates of "compact urbanism" and "15-minute cities" have gathered around the idea that densification is a solution to a number of different concerns: climate change (combatting sprawl and building lower-carbon urbanisms), economic growth (agglomerating "creative" or "inventive" urban areas), social cohesion, and decongestion (reducing carbased commutes by promoting compactness and public transit) (Haarstad et al., 2023). A pervasive "density solutionism" has taken hold. As Federico Pérez (2020, p. 18) has argued, densification has become "a centerpiece of urban agendas across the globe."

For more critical voices, this consensus amounts in practice to a depoliticized "density fetishism." Over a decade ago, Jim Russell (2013) characterized the rush to higher densities as part of a neoliberal "boutique" urbanism catering for wealthier residents and

financially speculative land-housing densification economies. This process operates not just in city centres, but at the urban edge too, in suburban developments from Cairo and Istanbul to Manila and Johannesburg (Güney et al., 2019). Many of the claims of "density solutionism" are increasingly contested, with research pointing to exclusive housing costs and often carbon-intensive forms of production and consumption despite the "green" claims (Ahlfeldt & Pietrostefani, 2019).

However, what's missing across these debates and in the larger positioning of HDU as either "problem" or "solution," is the experience and perception of residents themselves, particularly those living on the socioeconomic margins of the city. We use the concept of "density textures" as an alternative approach to understanding HDU, including its pros, cons, and possibilities. Rather than identify this or that level of density as good or bad in advance, we asked residents to describe their own experiences and perceptions. It is from these discussions that we began to use the term "texture."

"Texture" is not a new term for urban research. Most often, it is used to describe how a place or process becomes changed or nuanced. It is used to describe both how people become part of the making and remaking of urban space, and in how they make meaning of urban space, and in these ways is sometimes linked to a set of related terms, especially "weaving," "stitching" and "fabric." In Michel De Certeau's (1984) hugely influential Walking the City, texture refers to how people make their routes through the city and learn, partly as a result, different experiences and perceptions of urban space. This idea of the urban walker "weaving" or "writing" their world through routines of work or sociality has also been linked to how places are "stitched" together into unique relations based on how individuals encounter places in their everyday life (Mancini, 2020). As André Jansson (2007) shows, for Henri Lefebvre (1974/1997) texture described how, over time, space and the social significance attached to it can become impacted by the particular routes that people make in the city.

In The Production of Space, for instance, Lefebvre (1974/1997) describes "texture" in two key ways. First, it features as the material geography of place - paths, obstacles, communal and private areas, and so forth - and echoes how he sometimes describes "fabric" as the sprawling stuff of the urban. In this rendering, texture includes built forms that articulate spatial conditions and movement, that "break up space and give it rhythm," including monuments, transit geographies, and architectural structures (p. 150). These forms can be a relatively small space, such as an area around a square or across streets, or a much larger space, including the town and its surrounds (p. 235). Second, texture refers to the social "values" assigned to particular routes: danger, safety, waiting, promise, and the "meaning" given to space by "someone who lives and acts in the space" (pp. 118, 132). This second view of texture refers to both visible routes and invisible spatial conventions or ideas that can influence how people act as they move beyond their homes (Jansson, 2007). For example, texture has been used to describe how memory "lingers" in place, and becomes differently activated and politicized through the use of real and imagined pasts (Adams et al., 2001).

The related, and perhaps more common term, "fabric," has been typically more squarely linked to the built environment, from a general shorthand for urban infrastructure or housing, to a specific description for how key urban drivers shape urban form, including - to name just a few - state strategies of construction in urban China, nationalist planning of low-density urbanism in Israel, gang crime in Brazilian cities, and urban greening in Brussels (Feltran, 2020; Gandy, 2014; Guyot et al., 2021; Shadar, 2021). Sometimes fabric and texture are used together, even interchangeably. There is, too, urban research that uses ideas of "weaving" to describe everyday urban life, including as a way of identifying how people's social and mobility practices operate as "weaves" that produce some of the "fabric of everyday life," and how those weaves are differently made with distinct meanings and experiences that might vary from person to person (Chimrri et al., 2015; Curry, 2000).

There is also, of course, work on the more literal encounter between texture and the city, including research on the economies, labor processes and social worlds of urban textiles, crafts, and second-hand economies (e.g. see Grüneisl, 2024, on Tunis' *fripes*). Indeed, there have been efforts to develop an understanding of spatial texture from the process of textile making. In their work on "textures of place," Adams et al. (2001, pp. xiii, xiv) argue that just as "a textile is created by bringing together many threads and, as such, represents ordered complexity," so too is place the "weaving together of social relations and human-environment interactions." This echoes Doreen Massey's (2005) focus on place as a "bundle" of space–time trajectories. For Martin and Pierce (2003: 4), bundling is a "process by which people select or choose with ideas suggestive of what counts in their own minds as a part of a place, and what does not ... according to our own understandings and logics."

We find four elements valuable in these different accounts for how we understand texture here. The first is the dual conception of texture as both material stuff in the city, and how people make sense of their encounters with that stuff. To texture is to construct, to bring a form to a phenomenon, and this emphasis on making is helpful for our purposes here. Second, we value the focus in these accounts on *movement* as important for how textures are made – indeed, the term "texture" comes from the Latin "to weave" (Jansson, 2007). In their accounts to us, the respondents often referred to encounters with HDU with ideas suggestive of weaving: moving around, dealing with obstacles, negotiating jostling people and things, finding spaces for refuge, business, fun, and so on.

Third, we find the emphasis on temporality in these accounts helpful. In the course of the research, the ebbs and flows of HDU in different places emerged as important in the responses, as well as in our own observations. At some moments, perhaps in the morning as people leave home to start the day, the neighborhood might be especially busy, and we can think of the texture of HDU becoming more intensely or tightly woven, only to disentangle and quieten later in the day. Density textures shift over the course of day, night, week, and even over decades, shaped by multiple and ongoing rhythms of personal, neighborhood, and national processes and the configurations of poverty and inequality (Tripathy & McFarlane, 2022). And fourth, texture is both individual and collective. On the one hand, it is a collective experience that is formed through dense conditions, and as we say that ebbs and flows. So we have a collective texturing of HDU at any given time and place, which is typically subject to change. On the other hand, HDU is differently experienced - or "textured" - by residents themselves. Residents experience and perceive HDU in different ways, finding distinct concerns, positives, negatives, and opportunities through it. Taken together, these four elements point to texture as a more useful way to describe how people experience and perceive HDU than related terms like fabric or bundle.

Density textures are not abstract processes, then, but linked to the lived experience of urban space. They are characterized by embodied, sensorial and subjective content, including heat, jostling, shoving, discomfort, hazards, risk, navigating, noise, fear, violence, apprehension, exhaustion, laughter, fun, play, and more. They are shaped by social difference, including differences of class, age, gender, or disability. They relate intimately to space, and in particular to the microgeographies of the neighborhood and wider city, from where and when to locate a market stall or how people differently experience crowded jeepneys (converted trucks that act as public transport), or seek to ensure personal space amidst dense proximities or within the "overcrowded" home. They blur the relations between the human and non-human.

In reflecting on density textures, we move between the terms "density" and "crowd." The crowd is a particular expression of high-density which emerged from the first interview onwards as a concept that people could easily relate to. For example, some of the Tagalog translations of density that we used in the interviews which most resonated with respondents - siksik and matao - describe characteristics of crowds. The crowd opened a focus on the different forms of density people encounter in and beyond the neighborhood. While we sought to discuss different kinds of density, including population density and transient density, it was often temporary crowds – be those in the neighborhood, the market, or in different places across the city - that people associated most with HDU.

There are two broad ways of understanding the crowd: as a self-defined entity, such as a sport or protesting crowd; and as an emergent process, such as the commuting, rushhour, or a neighborhood or city centre evening crowd. Our use here is in relation to the latter. While they are multiple in form and content, and difficult to interpret, crowds can also provide insight into social life, including themes of experience, identity, belonging, hope, fear, frustration, joy, and possibility (Steffen, 2021). As with density more generally, our approach was not to define the crowd but to examine how it becomes experienced and understood by respondents (Borch, 2012).

Negotiating dense space

The residents we spoke to experience density as ebbs and flows, following geographical micro-shifts in circumstances and amongst the rhythm of the day, week, season, and decades. Here, we explore density texture by focussing on two ways in which the respondents described their negotiations with HDU: the hazards of overcrowding - first in the neighborhood and then second in the market - and navigating densities "on the move."

Overcrowding and its hazards 1: the neighborhood

A key theme that emerged in relation to negotiating densities was a distinction between the "good crowd" on the one hand, and the hazards of "overcrowding" on the other. Density in Barangay 105 is predominantly horizontal, an experience of congestion of people, traffic and buildings on the street and in the lanes through the neighborhoods. One resident, Gloria, runs her own fast food stand with her husband from her home on a busy dirt road that runs through Happyland. She described a recurring tension across our respondents where, as she put it, people "want the crowd," for example

because of how it supports local businesses and generates economic opportunities, but look to avoid the negatives of "overcrowdedness."

For Gloria, the crowd is a business potential. She also benefited from an extensive friendship and social network, including neighbors from whom she might borrow an everyday item, or who might watch over the kids when something comes up. Here, density acts as a social resource: "I like it when I have many neighbors." However, she went on to describe the challenges of overcrowdedness, and singled out concerns for children. She worried about accidents as children play amidst the traffic – carts, bikes, motor-bikes, trucks, and people – squeezed into a narrow slither of urban space:

I do not want overcrowdedness ... When I walk I am feeling compactness. Especially when it is in the afternoon. I feel this with those children. The motorbikes and tricycles they just adjust to those children [in the streets]. I feel irritated.

Gloria specified her concerns with the crowd by time (afternoon) and place (the street), and identified particular concerns (children). The question of negotiating HDU was differentiated by how the respondents come to see or learn the relations between time, space, and their own priorities. Density is not just *there*, it is felt and narrativized – *textured*. This texturing extends to concerns about the future of the neighborhood. Gloria worried about growing crime rates, about the local drug economy, and how all of that might impact her children's life chances. Negotiating the crowd meant managing not just the congestion in front of you but the hazards that she linked to increasing density as the years go by.

Most respondents turned to this distinction between the good crowd and the problems of overcrowdedness. Tess, for example, is a social worker in her early twenties working at an NGO in Barangay 105, in an office close to where she grew up. Like Gloria, she pointed to the benefits of a denser neighborhood, including more business and jobs, and a more "dynamic" social scene. However, the area was nonetheless, in her view, increasingly dangerous, requiring the constant negotiation of flows of risk. She reflected on how the neighborhood had changed over two decades, stating that as a child it had felt "much quieter, less people, less pollution, more orderly."

Now, however, just moving around the neighborhood is a very different experience:

I cannot peacefully pass through a street even in a short distance, because children will hit me, run towards me, and there is a lot of dirt in the streets, and then the floods – just a light rain and a flood!

Then there are the animals to negotiate: "I am scared of dogs. Dogs are everywhere. It is a battle everywhere to pass through a short distance for me. There are a lot more dogs and cats now than before – and rodents." She paused: "It is just a different environment ... sometimes I feel I do not want to be here." Here, density emerges not just as numbers of people, but as people and movement, animals, material conditions, and even weather. Together they form a changing texture of density that demands vigilant and careful negotiation, a density that for Tess is sensed, embodied, and dynamic.

If "overcrowding" surfaced here as a problem of navigating busy spaces, Tess also spotlighted overcrowding in the home. She worried about the spread of disease, especially tuberculosis (TB), through overcrowded homes, streets, and public spaces:

I think TB is correlated with crowdedness, between the families and within the families ... [see] how many people are occupying a small space? When they sleep they lie down next to each other and when they inhale and exhale they cycle the air in the house. (we return to TB below)

She spoke too of how neighbors struggled to maintain secrets from one another in small domestic spaces where they could often overhear talking or disagreements. Like other respondents, she articulated deep concerns that while crowding created social and economic possibilities, overcrowding meant that finding space – in the street or in the home – to be safe and healthy, for privacy, and even to survive, was increasingly difficult to negotiate.

Overcrowding and its hazards 2: the market

In contexts where congested space is intensely used, negotiating HDU can sometimes seem impossible. On a hot, busy Saturday afternoon in Divisoria market, we spoke to Joel, a hawker who sells pomelo, a fruit, from a wooden cart. A young man of slight build, Joel sat next to his cart and told us about his daily struggles to find a small piece of urban space to sell. The challenge for Joel is that he needs to be close to the crowd – otherwise "business is slow" – but then is sometimes identified as an obstruction by traders, those making deliveries, or customers themselves. In seeking out a corner or square meter or so of space, he is constantly having to read the ebb and flow of densities and the potential obstructions that he might generate. An area that seems to have space for him in the morning might not by lunch time, if more stalls and shops have opened or if new deliveries happen to be being made near where he is, which can form sudden bottlenecks of people and traffic.

When there is "heavy traffic," he said, "people cannot pass through [and] I make it worse." Joel is not in a position of power to contest these moments. More, his assumption is that he is somehow in the wrong. His position was that the crowd needed a degree of order so that people could keep moving and trading continue, even if "order" meant he had to move on. He talked about how the police or "tanods" – local community security – ensure that crowds keep moving, that obstructions are removed, and that arguments or crime are prevented or dealt with: "There are no people quarrelling here or people messing around." When asked to move on, then, Joel's response is to gather his cart and seek out somewhere else, navigating the dense configurations of people and cars. Or, he might have to bide precious time waiting nearby for the higher density to thin out a little. "When it is too crowded, I just wait for this place to be not that crowded." In Joel's account, we see how density textures often operate not as pre-set calculations or abstract decisions, but in-the-moment, as dynamic responses and judgments made in relation to the processual, changing form of HDUs.

Joel's sense of a lack of agency speaks to a theme across our small sample of interviews about who is and who is not able to negotiate the crowd. In the market, the more established larger traders, or the customers in the expensive cars, have a degree of class power in occupying space that Joel does not possess. The concerns he attached to the crowd repeat-with-difference amongst other traders. Bea, who sells school uniforms, spoke about the advantages of her rented stall's location at the corner of the building. Indeed, for some, it is location and not density that matters most. Tina, who sells, on

foot, large shopping bags in the market, felt that the actual thickness of the crowd mattered less than her prime position relative to other bag retailers. For Joel, the challenge was combining high-density footfall and a location where he was tolerated.

If density texture in the market crowd is an ongoing dynamic negotiation, all kinds of risks surface. One former trader living in Barangay 105 described how his wife was robbed at knifepoint behind their market stand. The fact that there is so much going on at any given moment in an HDU - the sheer level of distraction and noise in an intensely occupied informal market - he said, worked against them. The thief had appeared from the crowd, seemed like another customer, and then after the robbery disappeared back into the hubbub and flow: "Because of the crowd, we did not know if they had brought something dangerous to hurt her. But she said something was pointed at her. This happened at night-time about 7pm ... [he took] around 10,000 pesos in cash." Again, time and space matters - the dark, the intensity of movement and crowding, and the capacity to appear and escape - and people's differentiated sense of HDU, their individual density textures, are shaped over time through these kinds of moments.

There are other risks to negotiate. Female respondents spoke about problems with sexual harassment and abuse. Tess told us that when at Divisoria she walks with "a bag then I can just swing ... in front of me ... otherwise people will simply touch you," and adopts a body position that communicates "give me a space." Another young woman who lives in Happyland and who works as a fish peddler at Divisoria said that while she herself does not worry about the market crowds, on the days when she has to bring her two young children she is anxious that they might slip from her hands and "be lost in the crowd."

Navigating densities on the move

Just as density in the market or neighborhood is shaped in part by class inequalities, so too is density "on the move." Joel spoke about the exhausting and sometimes dangerous challenge of pushing his wooden cart for hours a day through the traffic as he travels to and from Divisoria. Manila has some of the highest levels of traffic congestion in Asia, a "carmageddon" costing an estimated £45 million every day (Howard, 2016). One of the most popular means of transport in the city are jeepneys (jeeps) - crowded, colorful, and part of the culture in the city, and which took shape during the American colonial period as repurposed military trucks. They are used in almost half of all public transport trips and by the poor in particular (Coonan, 2016).

One elderly man described his regular commute by jeepney, and compared the bodily jostle of boarding and getting a seat when it is busy with a more relaxed late night trip:

You sit very tightly with others because many people will fight for that seat, or just to be in that jeep. And this is especially true when it is rush hour. We have experienced difficulty in just boarding a jeep ... In night-time that is not the case, especially when it is, 9-10pm.

Even the queue can be an intense experience of density, as people push for position when the jeepney approaches:

Sometimes people will push, and will use their body to outpace you [balyahan]. So, it is difficult to commute. In this place, people are not sensitive to your age. They all want to board first. This is especially true in going to work.

Sometimes he is able to get a seat for his wife but he is forced to hang on to the outside of the jeep.

On the move, density textures are intensely embodied, and can draw out all kinds of social evaluations. For one young man, the issue with crowded jeepneys was not getting on or finding a seat, but the "different odours" of the people you end up pressed against: "Some commuters do not have a good odour or do not dress well ... I just adjust to my seat and look out the window." HDU on the move is differentiated by the time of day of the journey, the spatiality of the vehicle, age, income, bodily ability, and gender. For one young woman, overcrowded jeepneys make it especially difficult to get on and off with children or bags, while the tight confines of the vehicle can sometimes lead to harassment. One said that she and women she knows have had to learn "how to protect themselves" from the harassment experienced by many women in public transport in Manila, sometimes reported in media and research (Ceccato & Loukaitou-Sideris, 2022; Mateo-Babiano et al., 2020).

Rodolfo, a 52-year-old tricycle taxi driver, provides a different account of negotiating densities on the move. He has learned to navigate the narrow and congested streets of Tondo by being "adjustable." Being adjustable is a learnt skill of reading the urban environment with care, safety and confidence. Rodolfo described the need to be a "sure ball" when driving to avoid bumping into other vehicles, a term that refers to adjusting speed, anticipating bottlenecks, and approaching busier intersections with caution, especially during rush hour when bumps and small collisions often occur. These different forms of negotiating density on the move connect bodies, temporality, urban space, livelihood and everyday life. The respondents we spoke to "weave" their own texture of HDU according to their circumstances, needs and aspirations. This echoes Rao's (2007) account of "adjustment" in Mumbai. She identifies adjustment as an ongoing and differentiated practice of experiencing social mass in the city. For her, these are the microgeographies of density that are learnt in order to avoid collisions, conflicts, and violence, and to enable space for one another in the congested city. We also see here moments where adjustment breaks down, where people are pushed aside, harassed, threatened, and stressed by the compression of bodies in tight spaces.

The two forms of negotiating HDU described in this section are, clearly, closely related. The residents we spoke to calibrate the "good" and the "bad" of densities in ongoing ways, seeking to use it, avoid it, put up with it, worry over it, wade through it, and so on. Density textures constitute a highly variegated and changing social field requiring ongoing attention, learning, and bodily work. Individuals themselves embody the contradictions of HDU: valuing for example the economic and social dimensions of having a large number of people around, but worrying about health hazards, being pushed aside, and urban futures that might be denser and more hazardous still. These concerns connect space and time. They bring into one frame historical conditions, such as perceptions of the relative ease of moving around the neighborhood in the past, with issues like finding privacy, finding opportunities or managing risks in the moment, and worries about what lies ahead for children. Space-time matters throughout, from occupying a place to sell to the crowd, or concerns about the microgeographies of movement amidst HDU on foot or by jeep or pushing carts, to fears over crime or infection to the skilled negotiation of road densities.



The unruly crowd

There is a long global history whereby those in power have sought to delegitimize the crowd and portray it as socially and politically dangerous (Borch, 2012). Across this history is a distinction between the calm, quiet crowd that is peaceable and potentially subservient to power, and the crowd as unruly and dangerous force (Gandhi, 2016). Here, we explore the "unruly" crowd as a density texture in two ways: first, the crowd itself acting as a collective force, and second individuals or groups within the crowd who are viewed as disturbing the peace.

The crowd as collective force

Grace, in her twenties, has run a ground-floor shop in GK, an area adjacent to Happyland in Barangay 105, since 2010, in a building owned by her mother. The small neighborhood store is open between 7am and 3am and sells everyday items in affordable portions, from cooking oil and scouring pads to rice, sweets, tinned food, washing sachets, cigarettes, and alcohol. Grace spoke with us over a quiet afternoon, the odd customer appearing at the small window, and her young son lounging next to us. At the time her electricity was down and she had connected two dim bulbs to a neighbor's house. The air in the shop was humid, enclosed, and damp.

Grace said that while she was used to crowds, her worry was violence. Specifically, if a fight breaks out, people gather to watch it, forming a noisy jostling crowd, and creating a situation that seems to her on the brink of escalating out of control. The aggressive and unpredictable crowd she described was one populated by young men. The fights are quite common, she said, and she worried about her son becoming caught up in them. When they occur she locks her son in the house: "The fights often involve knives." Other respondents similarly described their concerns about fights breaking out. One woman who runs a small roadside fish store said the problem was worse at night. She leaves early in the morning for Divisoria to buy fish and sometimes sees groups of young men fighting, perhaps, she speculated, over drugs or territory.

At the office of a local NGO, a member of staff spoke about other instances where a crowd might shift and become aggressive. She described giving out food or medicine, and the need to carefully regulate provisioning and queues otherwise the crowd "will mob you before you know it, and the food is gone ... They get aggressive." And so, the NGO issues tickets and insists on queuing - to "maintain our sanity." This idea of the unpredictable unruly crowd is a concern that many of our respondents projected onto the neighborhood, often as a latent and masculinized potential, and it plays a role in how individuals piece together their individual density textures. It is a construct not only of people's apprehensions about violence and safety, but of the risks and unpredictability of dense citylife (Chowdhury, 2021).

Keeping the peace

In his 50s, Rodel is a well-known and long-time resident of Happyland. He lives with his wife and children, and runs a small coin-operated internet and computer rental shop from his home. He also works as a local enforcer, paid by the Barangay administration to help keep the peace as a "tanod." Rodel talked positively about high density but focussed his attention not on the crowd as a collective, but on how individuals can act to disrupt crowds.

There is little public space in Happyland other than a busy and well-used basketball court. By day it is used by teenage boys playing basketball, and many others passing through. There is a state-imposed curfew in the area that means under-18s must be at home by 10pm, so the groups that dominate the court by day dissipate later at night, and the social composition shifts. By night it is a place to buy and sell freshly cooked food, and to spend time in conversation with friends. "Here in the court, many are selling food in the evening," said Rodel. "Many are eating in the court. Some will just sit anywhere, and will drink alcohol. In this place you do not meddle with anyone. You just buy food and drink alcohol, and that's it."

The basketball court, Rodel continued, would often have a pleasant "clustering of people [umpukan, meaning 'gathering']": "They will make jokes. You will just walk through. It's fun." The problem is that this crowd-at-ease can change, and this is where Rodel's description of people "meddling" comes to the fore. Later in the evening, he said, people sometimes became too loud or rowdy, disturbing the experience of a peaceful HDU. In those moments, he will often retreat to the house and have a quiet beer on his own. Sometimes, however, he intervenes. This includes responding forcibly by threatening or even becoming violent towards those people in disturbing conditions. This is especially the case if someone is becoming intimidating or aggressive, or who might have stolen something from someone else, or even just become drunk and "annoying": "Drunkards do not have respect when they are talking. So sometimes ... a bigwas [punch] ... [And] to those thieves that are annoying ... We need a little of discipline." Other tanods we spoke to had similar views. Jasper, for instance, said that while he generally felt "very happy" in the crowd because he can remain "acquainted with people," "sometimes there are troubles, but the tanods secure it."

Rodel's idea of "meddling" operates as a kind of threshold concept identifying the point at which the experience of HDU can shift from ease to agitation. He might remove himself or forcibly involve himself - sometimes as a paid enforcer, and at other times as a resident who has the social and political capital to act. But this is an unpredictable situation, and circumstances can escalate. Rodel's recognition that he "cannot control the behaviour of others" points to a deeper quality of the urban social as operating in relation to but in excess of formal and informal rules. Rather than crowd-as-threat, the concern, for Rodel and Jasper at least, is one of individuals threatening a particular set of conditions, that of a relaxed evening crowd atmosphere. This work of modulating around the threshold is itself part of how Rodel pieces together his own density threshold.

Rodel and Jasper portrayed themselves as defenders of the crowd, and did so with a strong gender politics. There was more than a hint of performative masculinity in how Rodel described dealing with trouble. To some extent, this is coded to the spaces be moved through - the predominantly male basketball court, and the male-dominated evening drinking in the same space - as well as the self-identification as protector and the desire for a style of control. At the same time, the sources of trouble in the crowd - for both Rodel and Grace - are gendered. Once again, it is predominantly young men that are cast as the disruptors here.

The comments from tanods like Rodel and Jasper point to the issue of securing the crowd. Most respondents had stories about "snatching," where people, usually young men, grab a purse, handbag, mobile phone, or other valuable, and run. A story from one NGO staff member, who insisted that crime had increased as the neighborhood had become denser, is indicative of this. She said the staff had to be constantly vigilant. "There was one time I'm speaking to a social worker," she recalled, "the social worker is inside the car, the windows are open and then suddenly somebody just snatched the cellphone!" There was a view that higher densities meant constantly being on your guard, scanning for risks. This echoes findings from spatial analyses of violent crimes in Manila, which found a relationship between population density and incidence of murder and physical injury (Mojica et al., 2019). That said, this was not a universal view amongst our respondents. Some people said they felt safe when moving around the area, that crime was exaggerated, that density itself could disincentivize crime because perpetrators might be seen and caught, and that the crime that did exist had to be understood in the context of poverty and inequality that made people desperate.

Nonetheless, it is partly for this reason that some of the respondents were supportive of the previous Duterte political regime, which controversially made dealing with crime a centrepiece of government. Duterte's "drug war" has impacted the spaces of policing and everyday life in many of the low-income neighborhoods of Manila, as well as perceptions of safety and crime in the city (Jensen & Hapal, 2022; Warburg & Jensen, 2020). The tanods are separate from the police system and tend to deal with minor concerns, but have sometimes been co-opted as part of the "drug war," and the enforcement and apparatus of security has deepened in recent years. At the Barangay 105 office, for instance, security is augmented by an impressive set of monitors hooked up to CCTV cameras in the area, monitored by the tanods. One of the officials using the system explained: "We see the cases of snatching, road accidents [and fights] ... and with that we can report it to the police ... and review the footage."

Gender and safety emerged in other relations to this idea of "disrupting the peace," including harassment or abuse in the crowd (Valdez et al., 2022). One local NGO runs a "Violence Against Women and Children" campaign that counsels parents in an effort to reduce violence in and beyond the home. The campaign includes seminars, one-to-one support, and aims to create a context where people can talk about abuse and harassment, including domestic violence. A staff member argued that people's living and working conditions are exacerbated by high densities and overcrowding, especially in relation to mental and physical health, and that for some drugs - methamphetamine for instance - become an escape route (Palatino, 2019). It is not, she said, that HDUs cause behavioral problems, but that poverty and conditions, from high rents to inadequate sanitation, exacerbate their negative aspects.

Security, in sum, is an important concern that informs the density textures of individuals we spoke to form, and one that is both shaped by the broader political and economic context and enacted in different ways by residents. It is differentiated by gender and age, caught up in performative social power, linked to perceptions of how the crowd ought to be constituted and maintained, and targeted at predominantly young men portrayed as "disruptors."



Density's material substrates

With HDU comes all kinds of non-human accompaniments that play various passive and active roles in shaping density textures. They form a dynamic material substrate that weaves into density textures, including animals, insects, plastics, wastes, buildings, debris, and even the sea. Here, we describe several varied issues that emerged in interviews, including fragmented housing and infrastructure, fire, and the sea.

Density requires an ecology of material provisioning. However, in Barangay 105 homes are often overcrowded and damp, electricity is unreliable, drainage and waste collection are partial, and solid waste is prevalent in what little public space is available. The equation of urban provisioning and density is deeply unbalanced, meaning that homes and surrounding areas require ongoing labor that typically falls on women and carries consequences for safety, health, and well-being (McFarlane, 2021). These conditions generate a host of ongoing risks. Sharing small homes and tight neighborhood spaces helps spread TB, and mosquitoes are a recurrent worry, particularly in relation to dengue fever. The Philippines ranks fourth for global incidence of TB, and the impact is biggest in the country's poorer urban neighborhoods (Flores et al., 2022). One local NGO staff member spoke about overcrowded homes and added: "You look at the alleys here with the really cramped space. So it's a disaster in health. Why? ... No ventilation, and so when one gets sick, everyone gets sick ... Tuberculosis is really the pandemic here, not Covid."

Densely packed inadequate housing and infrastructure generate other hazards. One theme that emerged in the interviews was fire. Fire can move through congested homes with terrifying speed, particularly in the poorest homes where they tend to be made of wood. In April 2020, for example, a fire was caused, it is rumored, by a candle that had been left burning. One resident, who had her house destroyed and who lived in the area where the fire did most damage, spoke of the sheer panic of the crowd running to escape with their children and whatever belongings they could carry. Another resident in Happyland recounted: "It was big... The fire came from the rear of the [basketball] court. We thought the fire will go here. We were surprised it died ... The good thing is the firemen came and they cleared the fire." In many parts of the area, however, fire trucks could not access the narrow lanes, and 750 families were left homeless.

Candles are now prohibited in the barangay, but given that people use candles because electricity is unreliable and partial, their banning leaves people either breaking the rules or in the dark. Sustained state investment in extensive electricity provision would be a better response, but has not been forthcoming. One response to fires in the area has been to rebuild houses with greater distance between them, but there is woefully inadequate investment by the state in the material substrate of the city's poor, dense neighborhoods. As a result, hazards proliferate. Indeed, in March 2024 another fire destroyed 140 houses and displaced 1800 people.

We close this section with two other concerns that risky materialities that respondents raised: the main road, and the sea. The large multi-lane road that runs through Barangay 105 has a footbridge across it, but it is closed and has not been repaired. There is a rumor that the bridge was poorly built in the first place and that there is no state commitment to ensuring a safe reliable improvement. As a result, adults, children, the elderly, and those with disabilities are forced to cross a large, busy multi-lane highway with quickly moving traffic. One respondent asked how a wheelchair user could possibly move around much anywhere in Barangay 105, let alone the highway, and wondered whether urban planners

even consider people in this position (Pajarin et al., 2018). There are no traffic lights at the entrance to the Barangay or to Happyland either side of the highway, and accidents are frequent. Domingo described how his wife had been hit three years previously by a truck on the road. She can no longer walk as a result and stays at home. "She does her work inside by unpeeling garlic. She unpeels it and packs it ... She cooks. She does our laundry. She takes care of her children who are going to school."

Finally, the sea presents significant hazards to HDU. If for some disease or fire risk informs their individual density texture, for others it is the sea. Through land in-fill and sea reclamation, Manila expanded its land by almost 20% between 1990 and 2015, and as climate change intensifies weather extremes it is the poorest who are most vulnerable (Reyes et al., 2020). Given that many of the neighborhoods in Barangay 105 are built next to the water's edge, there is a densification of the sea at work as waste and other materials generate precarious slithers of land that houses are then built upon, often using wooden supports over the water. One woman we spoke to lives in one of these makeshift homes with two young children:

Our house is erected at the sea itself ... [We experience] typhoons and waves ... [sometimes] our poles are destroyed, our roof flies, and also our walls ... Our houses are weak because we do not have the capacity to buy braces. You just walk in there our house will shake; you also experience this when you sleep. Even those dogs that walk, it will shake ... Our house is like a swing, a few movements it will shake and you will get dizzy ... it is dangerous. You are anxious.

She is forced to evacuate the house during typhoons and often finds it in disrepair when she returns, but does not have the resources to convert the house from wood to cement as some of her neighbors have. One of her children, as a baby, had fallen into the sea and was only saved because her husband was able to dive in immediately. There is a bridge to the land, with no railings or handles, that people, especially children, sometimes fall from. There is a constant movement of domestic materials and even parts of houses to and from the sea. Sometimes she has found plastic items she can use in the house – cutlery for instance – and she has lost clothes and even at one point a roof to the sea and weather. Having seen other homes collapse, she has filed requests with the Barangay 105 office for a vacant spot in-land from which she could build a new house.

Conclusion

While there has been a growing global debate in recent decades around whether HDU is good for cities, the experiences and perceptions of residents themselves are often oddly left out of the picture. From our empirical snapshot of highly dense Barangay 105 in Manila, HDU emerges as both valued for social and economic life, and a source of hazard, risk, and anxiety. It is a multiple and dynamic process experienced differently according to gender, age, and class, and rooted in place-specific contexts and moments. At the same time, the residents we spoke to know that HDU is a product of the larger political and economic conditions of the city, from the disinvestment in housing, infrastructure, and services such as health care, or the lack of secure formal jobs, to the policing of everyday living linked to so-called "drug wars."

Density textures are formed over time as residents encounter different forms of HDU in the city. Rather than a fixed thing, people's perception and experience of density changes over time as their life conditions change, and indeed as the neighborhood and wider city change around them. We must be careful, then, of the temptation to identify this or that issue as especially important for poor, dense communities in advance of asking residents themselves about what matters most to them. Examining how density textures are formed provides insight into everyday living, concerns, aspirations, and fears. It leads not to a definition of HDU, but to a picture of the sort of concerns HDU might generate, for good or ill, including what it means to people, both in itself and as an important feature of urban life now and into the future.

Our hope is that the concept of density textures becomes one useful route for developing a larger research agenda around density based on how it is experienced. Future research on urban density would benefit from closer engagement with how residents "live" densities in their different forms. Doing so opens out possibilities not only for conceptual development – such as density textures – that broadens the vocabulary of HDU, but could inform policy and practice so that it is better attuned to the life-worlds of residents themselves. Our approach has been to pursue this primarily through interviews, observation, and secondary data analysis, but this is a research problem that could benefit from methodological experimentation that reveal experience and conditions, including "go-alongs," mapping methods, and visual approaches based on film or photography.

A focus on density texture does not leave us in an easy position with the idea of density. It is an approach that generates a multiplicity of empirical issues, while at the same time we are confronted with the representative sample problem: do we have enough to say something general about HDU in this place? We make no such claims to do so here on behalf of Barangay 105. However, our account repositions "density" precisely by pluralizing and, as a result, destabilizes whatever preconceptions we might have of HDU. Density is a profoundly uncertain placeholder. Its radical plurality disrupts singular accounts of its problems and solutions. This creates a challenge for future research on density textures, but an exciting one, given that it opens up new ways of thinking and writing density. At the same time, even the snapshot here indicates some recurring concerns, such as the need for enhanced material provisions - housing, infrastructure, and services - that can ensure a higher degree of safety and security, and which underline the political potential of research to push for better densities in the future.

Acknowledgements

We are grateful to three anonymous reviewers for very helpful feedback on the initial draft paper. We thank Reden Recio for his advice during the research.

Disclosure statement

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

Funding

The research for this paper was funded by the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No. 773209).



Data availability statement

Data cannot be shared for ethical reasons.

Research ethics and consent

Informed consent was provided by the research subjects as either written or oral informed consent.

ORCID

Colin McFarlane http://orcid.org/0000-0001-9209-4494

References

- Adams, P. C., Hoelscher, S., & Till, K. (Eds.). (2001). Textures of place: Exploring humanist geographies. University of Minnesota Press.
- Ahlfeldt, G. M., & Pietrostefani, E. (2019). The economic effects of density: A synthesis. Journal of *Urban Economics*, 111, 93–107. https://doi.org/10.1016/j.jue.2019.04.006
- Alvarez, M. K., & Cardenas, K. (2019). Evicting slums, 'building back better': Resiliency revanchism and disaster risk management in Manila. International Journal of Urban and Regional Research, 43(2), 227–249. https://doi.org/10.1111/1468-2427.12757
- Boquet, Y. (2015). Metro Manila's challenges: Flooding, housing and mobility. In R. B. Singh (Ed.), *Urban development challenges: Risks and resilience in Asian megacities* (pp. 447-468). Springer.
- Borch, C. (2012). The politics of the crowd: An alternative history of sociology. Cambridge University Press.
- Brickell, K., Parsons, L., Natarajan, N., & Chann, S. (2018). Blood bricks: Untold stories of modern slavery and climate change from Cambodia. University of London. Accessed November 15 2019. http://un-act.org/wp-content/uploads/2018/10/Blood_Bricks.pdf.
- Ceccato, V., & Loukaitou-Sideris, A. (2022). Fear of sexual harassment and its impact on safety perceptions in transit environments: A global perspective. Violence Against Women, 28(1), 26-48. https://doi.org/10.1177/1077801221992874
- Certeau, M. D. (1984). The practice of everyday life. Berkeley CA: University of California Press. Translated by S. F. Rendall.
- Chimrri, N. A., Klitmøller, J., & Hviid, P. (2015). Studying the fabric of everyday life. Outlines: Critical Practice Studies, 16(2), 1–14. https://doi.org/10.7146/ocps.v16i2.22992
- Chowdhury, R. (2021). The social life of transport infrastructures: Masculinities and everyday mobilities in Kolkata. Urban Studies, 58(1), 73-89. https://doi.org/10.1177/0042098019875420
- Chowdhury, R., & McFarlane, C. (2022). The crowd and citylife: Materiality, negotiation and inclusivity at Tokyo's train stations. Urban Studies, 59(7), 1353-1371. https://doi.org/10.1177/ 00420980211007841
- Coonan, C. (2016). Residents of Manila's Happyland slum put faith in Duterte. The Irish Times, January 13. http://www.irishtimes.com/news/world/asia-pacific/residents-of-manila-s-happyl and-slum-put-faith-in-duterte-1.2707230.
- Curry, M. R. (2000). Wittgenstein and the fabric of everyday life. In M. Crang, & N. Thrift (Eds.), Thinking space (pp. 89–113). Routledge.
- Edelman, D. J. (2016). Managing the urban environment of Manila. Advances in Applied Sociology, 6, 101–133. https://doi.org/10.4236/aasoci.2016.63010
- Feltran, G. (2020). The entangled city: Crime as urban fabric in São Paulo. Manchester University Press. Flores, G. P., Alberto, I. R., Eala, M. A., & Canal, J. P. (2022). The social determinants of tuberculosis in the Philippines. The Lancet, 10, e38. https://www.thelancet.com/action/showPdf?pii= S2214-109X%2821%2900516-7.



Gandhi, A. (2016). The language of the crowd: Public congregation in urban India. *Distinktion: Journal of Social Theory*, 17(3), 308–315. https://doi.org/10.1080/1600910X.2016.1265570

Gandy, M. (2014). The fabric of the city: Water, modernity, and the urban imagination. MIT Press. Grüneisl, K. (2024). Becoming 'farazat': Re-examining feminisation from a Tunis used clothes sorting factory. Environment and Planning A: Economy and Space, 56(3), 736–750. https://doi.org/10.1177/0308518X231217442

Güney, K. M., Keil, R., & Üçoğlu, M. (Eds.). (2019). Massive suburbanization: (Re)building the global periphery. University of Toronto Press.

Guyot, M., Araldi, A., Fusco, G., & Thomas, I. (2021). The urban form of Brussels from the street perspective: The role of vegetation in the definition of the urban fabric. *Landscape and Urban Planning*, 205, 103947. https://doi.org/10.1016/j.landurbplan.2020.103947

Haarstad, H., Kjærås, K., Røe, P. G., & Tveiten, K. (2023). Diversifying the compact city: A renewed agenda for geographical research. *Dialogues in Human Geography*, 13(1), 5–24. https://doi.org/10.1177/20438206221102949

Hodal, K. (2013). 'Slum lab: Manila's quest to build a better informal settlement. *Informal City Reader*. Next City: Philadelphia. pp. 217–231. https://assets.rockefellerfoundation.org/app/uploads/20130926223344/The-Informal-City-Reader.pdf, Retrieved May 3, 2023.

Howard, E. (2016). Carmageddon: can electric jeepneys ease Manila's traffic crisis? *The Guardian*, June 3. Retrieved February 12, 2023. https://www.theguardian.com/cities/2016/jun/03/carmageddon-manila-philippines-electric-jeepney-traffichttps://www.worldbank.org/content/dam/Worldbank/Publications/Urban%20Development/EAP_Urban_Expansion_full_report_web.pdf.

Illy, H. F. (1986). Regulation and evasion: Street-vendors in Manila. *Policy Sciences*, 19(1), 61–81. https://doi.org/10.1007/BF02124484

Jansson, A. (2007). Texture: A key concept for communication geography. European Journal of Cultural Studies, 10(2), 185–202. https://doi.org/10.1177/1367549407075904

Jensen, S. B., & Hapal, K. (2022). Communal intimacy and the violence of politics: Understanding the war on drugs in Bagong Silang, Philippines. Cornell University Press.

Joiner, A., McFarlane, C., Rella, L., & Uriarte-Ruiz, M. (2022). Problematising density: COVID-19, the crowd, and urban life. *Social & Cultural Geography*, 1–18.

Jones, S. (2015). A lack of clean water and sanitation in The Philippines kills 55 people every day. *Vice News*, March 27. https://news.vice.com/article/a-lack-of-clean-water-and-sanitation-in-the-philippines-kills-55-people-every-day.

Kwak, N. (2015). Manila's 'danger areas'. *Places*. https://placesjournal.org/article/manilas-danger-areas/. Lefebvre, H. (1991). *The production of space*. Blackwell. Translated by Donald Nicholson-Smith (Original work published 1974).

Mancini, C. B. (2020). Spaces of the fantastic, the fantastic of spaces: (Pscho)wandering the urban texture of London. In D. Punter, & C. B. Mancini (Eds.), *Space(s) of the fantastic: A 21st century manifesto* (pp. 15–37). London: Routledge.

Martin, D. G., & Pierce, J. (2003). How to think about cities. Cambridge: Polity.

Massey, D. (2005). For space. London: Sage.

Mateo-Babiano, M., Gabucayan-Napalang, S., & Abuzo, A. (2020). Manila, Philippines. In V. Ceccato, & A. Loukaitouideris (Eds.), *Transit crime and sexual violence in cities: International evidence and prevention* (pp. 63–71). Routledge.

McFarlane, C. (2021). Fragments of the city: Making and remaking urban worlds. University of California Press.

McIntyre, W. E. (1955). The retail pattern of Manila. *Geographical Review*, 45(1), 66–80. https://doi.org/10.2307/211730

Mojica, V. J., Choi, A., Leong, R. N., & Co, F. (2019). Spatial analysis of violent crimes in Metro Manila, Philippines. *International Journal of Comparative and Applied Criminal Justice*, 43(1), 29–47. https://doi.org/10.1080/01924036.2017.1398669

Pajarin, J. P., Soriano, C. M., & Regidor, J. R. (2018). Assessment of mobility of persons with disabilities (PWDs) in Cainta, Rizal. *Philippine Transportation Journal*, 1, 1. https://ncts.upd.edu.ph/tssp/wp-content/uploads/2018/08/Pajarin18.pdf.



- Palatino, R. (2019). Tokhang in North Caloocan: Weaponizing local governance, social disarticulation, and community resistance. Kasarinlan: Philippine Journal of Third World Studies, 34, 1-2. https://journals.upd.edu.ph/index.php/kasarinlan/article/view/7073/6158.
- Pérez, F. (2020). The miracle of density: The socio-material epistemics of urban densification. International Journal of Urban and Regional Research, 44(4), 617-635. https://doi.org/10. 1111/1468-2427.12874
- Philippine Statistics Authority. (2016). Highlights of the Philippine population 2015 census of population. Philippine Statistics Authority. May 19, https://www.psa.gov.ph/content/ highlights-philippine-population-2015-census-population.
- The Purple Centres. (2016). Tondo. The Purple Centers Foundation. http://purplecenters.org/ home/our-centers/tondo/.
- Rao, V. (2007). Proximate distances: The phenomenology of density in Mumbai. Built Environment, 33(2), 227–248. https://doi.org/10.2148/benv.33.2.227
- Recio, R. B. (2022). Street entanglements: Contestation, collaboration, and co-optation in Manila's informal vending spaces. Journal of Urban Affairs, 44(9), 1205-1223. https://doi.org/10.1080/ 07352166.2020.1798242
- Reyes, R. A. G. (2016). Where are the toilets? The Manila Times, February 1. http://www. manilatimes.net/where-are-the-toilets/242627/.
- Reyes, M. R., Gamboa, M. A., Daguio, K. G., & Rivera, R. R. (2020). Manila: Understanding neighbourhoods for a more sustainable city. Centre for Sustainable, Healthy and Learning Cities and Neighbourhoods, Research Summary. Retrieved March 12, 2023. http://www.centreforsust ainablecities.ac.uk/wp-content/uploads/2020/10/SHLC_Research_Summary_05_MANILA.pdf.
- Russell, J. (2013). Density Boondoggles. New Geography. Retrieved February 12, 2023. https:// www.newgeography.com/content/003634-density-boondoggles.
- Saguin, K. K., & Alvarez, M. K. (2022). "Danger zones," "death zones," and paradoxes of infrastructural space-making in Manila. Journal of Urban Technology, 29(1), 145-152. https://doi. org/10.1080/10630732.2021.2009288
- Sebag-Montefiore, C. (2015). In Happyland: The child artists of Manila's 'Smokey mountain' slum. The Guardian, November 7. https://www.theguardian.com/artanddesign/2015/nov/07/inhappyland-the-child-artists-of-manilas-smokey-mountain-slum.
- Shadar, H. (2021). Crisis, urban fabrics and the public interest: The Israeli experience. Urban Planning, 6, 4. https://doi.org/10.17645/up.v6i4.4370
- Steffen, M. (Ed.). (2021). Crowds: Ethnographic encounters. Routledge.
- Tripathy, P., & McFarlane, C. (2022). Perceptions of atmosphere: Air, waste, and narratives of life and work in Mumbai. Environment and Planning D: Society and Space, 40(4), 664-682. https:// doi.org/10.1177/02637758221110574
- Valdez, I. K., Arevalo, M. V., & Robredo, J. B. (2022). Violence against women in the Philippines: Barriers to seeking support. The Lancet, https://doi.org/10.1016/j.lanwpc.2022.100471
- Valencia, C. (2016). Philippine population density up 32% in past 15 years. PhilStar Global, http:// www.philstar.com/headlines/2016/09/02/1619686/philippine-population-density-32-past-15-
- Warburg, A. B., & Jensen, S. (2020). Policing the war on drugs and the transformation of urban space in Manila. Environment and Planning D: Society and Space, 38(3), 399-416. https://doi. org/10.1177/0263775818817299
- World Bank. (2015). East Asia's changing urban landscape: Measuring a decade of spatial growth. Zortea, M., Bonis, M. D., Pupa, F., Ripldi, G., & Cucculelli, F. (2019). Community-based and integrated solid waste management: Experiences from Metro-Manila's Tondo district. Open Access Journal of Waste Management and Xenonbiotics, https://doi.org/10.23880/oajx-16000117