



Rooftop Autophagy Vertical Monadism in Maputo, Mozambique

Morten Nielsen¹ 

Published online: 27 July 2020
© Springer Nature B.V. 2020

Abstract

Based on recently gathered ethnographical data from Maputo, Mozambique, this article examines the vertical growth of the city. In particular, it focuses on the production of social and physical divides that emerge when the city's rooftops are being used for habitational purposes. During the last two decades, rooftop spaces in Maputo's inner-city have increasingly been appropriated for habitational use by owners of the buildings' apartments. In order to secure a viable subsistence level, owners rent out their apartments and move to small storage rooms on the rooftops. Very few of these rooftops have electricity and water installed and so residents connect to the buildings' existing but increasingly fragile systems of power cables, water pipes and drain pipes. In many of the city's apartment buildings, this spatial organization—where apartment owners living on the rooftops are informally attached to the apartment renters through a fragile and leaking system of pipes, tubes and cables—has caused numerous and ongoing conflicts, which constantly threaten to disrupt the volatile social stability of the building. In this article, I introduce the notion of 'rooftop autophagy' to capture the dynamics of a critical urban phenomenon, which grows by feeding on itself and, by so doing, generates major urban divides at the heart of the city.

Keywords Vertical urbanism · Maputo · Informality · Urban management · Housing market

Introduction

On 16 September 2019, an article was published in Mozambique's leading national newspaper *Notícias*, which discussed the critical conditions of Maputo's apartment buildings (Tene 2019). With the telling title 'Misuse and lack of maintenance: Scenes that suggest the end of some buildings', the article presented its topic by outlining some of the key physical features of the city's dilapidated apartment blocks: 'Cracks in the

✉ Morten Nielsen
Morten.nielsen@natmus.dk

¹ The National Museum of Denmark, Ny Vestergade 10, DK-1471 Copenhagen K, Denmark

walls, puddles of sewage water, trash and other signs of degradation ...characterize many buildings in the city of Maputo... In some buildings the situation is so serious that the security of the residents and users is threatened' (ibid.). According to António Simão Júnior, the head of the Department of Urbanization and Construction (DUC)¹ at the Maputo Municipality, there are currently more than 120 apartment buildings in the city, which 'do not offer the minimum conditions of security' for its residents. In collaboration with the city's Justice Department, the DUC is therefore preparing a series of legal measures to ensure that failure to maintain the apartment buildings is rendered illegal. The main problem is, as the reader is reminded several times throughout the article, that residents 'do not respect the norms of good conduct and coexistence'. In many apartment buildings, collective spaces (*espaços comuns*) on the rooftops and in the courtyards are appropriated by residents, who put up unregistered water tanks and build fragile shacks for relatives or tenants to live in. These additional constructions obviously put extra pressure on the old buildings, which have already endured several decades of severe neglect. In the Grancha e Silva apartment block in the lower and newer parts of Maputo known as the '*Baixa*', residents who are illegally occupying collective spaces on the building's rooftop have put up primitive toilets but without properly connecting the plastic tubes of the new informal sewage system to the building's original cast iron pipes. As one frustrated resident thus remarks, the consequence has been recurrent problems with infiltration (*infiltração*), where 'dirty water' (*água suja*) seeps down through the concrete ceiling to the apartments below.

In a sense, the following discussion of vertical urban divides in Maputo, Mozambique, can be read as an extended paraphrase of the *Notícias* article mentioned above. Based on recently collected ethnographic data from Maputo, I too want to discuss the critical conditions of the inner-city's apartment buildings. But whereas the *Notícias* article quite reasonably frames its analysis by figuring the precariousness of Maputo's apartment blocks as a reflection of a broader urban governance system, which has de facto collapsed, I start out by focusing on the inner social and material workings of a single building. By experimentally exploring one high-rise as a 'vertical monad'², it becomes possible, I will argue, to get a deeper sense of how internal differentiations play themselves out and how they come to affect and even productively condition the socio-material composition of the building. Hence, through an ethnographic exploration of ongoing contestations and appropriations of rooftop spaces in one dilapidated apartment building, I chart the contours of a socio-material system, which has generated a precarious stability by feeding on itself; what is here defined as 'rooftop autophagy'³. Informally erected rooftop houses have been connected to the building's fragile water and electricity systems, which cause numerous problems for the residents. And while collective spaces are formally the residents' shared property, they are predominantly considered as potential extensions of private spaces. Crucially, while 'rooftop autophagy' is also a reflection of a formal urban management system, which is

¹ *Direção de Urbanização e Construção* (DUC).

² In the following, a monad can be understood as a singular phenomenon that articulates its own (social, political, cosmological) systemic qualities by enfolding the exterior world within. Vertical monadism focuses consequently on the (monadic) systemic characteristics of apartment buildings in Maputo and is discussed in detail below.

³ Autophagy literally means 'self-devouring'. I discuss the concept of rooftop autophagy in the final section but, at the outset, I use it to refer to a process of regulated internal degradation of a social and material system.

gradually falling apart, this external context needs to be heuristically ‘cut off’ (Strathern 1996) in order to fully appreciate the ‘monadic’ dynamics of internal differentiations and divides and, especially, how they come to establish a precarious stability. As I will show in the following, ongoing tensions and conflicts are structured around the appropriation and (mis)use of shared spaces and do rarely extend outwards, e.g. as demands for housing improvement through formal channels. By unpacking how these frictions and differentiations play themselves out in the building, it will become clear how the stability of the internal socio-material system is based on their persistence. Although precariously, the contestation and appropriation of rooftop spaces offer a medium for collective reflection and negotiation of urban rights and privileges that other formats, such as the informal residents’ committee, fail to secure.

At Independence in 1975, Mozambique’s urban housing stock was nationalized and apartments that were previously owned by Portuguese settlers suddenly became available to national citizens who desperately needed a place to live. Less than two decades later, the nationalized apartments were sold to the residents, who were now legally responsible for running the apartment blocks and therefore also for their general maintenance (Morton 2018). Today, the majority of the former nationalized apartment blocks in Maputo correspond to the bleak characterizations in the *Notícias* article of unsafe and unhealthy living conditions following decades of little or no attention to the old buildings’ physical conditions. In this article I focus in particular on the contested meanings of the buildings’ collective spaces (*espaços comuns*) and the ways in which they give rise to series of conflicts, which paradoxically stabilize a social collective that is constantly on the verge of breakdown. As I will shortly argue, in many apartment buildings, collective spaces constitute a source of latent social tensions that constantly threaten to erupt into full-fledged conflicts. After having purchased their apartments from the state in the 1990s, many residents rented out their apartments opting instead to move into shacks, small storage rooms or former servants’ quarters behind the buildings or on the rooftops. Very few of the spaces that are now used for habitation on the rooftops have electricity and water installed and so residents hook up to the buildings’ existing but increasingly fragile systems of power cables, water tubes and drain pipes. And it is this autophagous socio-spatial organization of apartment owners living on the rooftops, while being informally connected to the apartment tenants through fragile and leaking systems of pipes, tubes and cables, which constantly threaten to disrupt the precarious socio-material stability of the old apartment blocks. At the same time, however, these always latent conflicts also bring together residents with opposing interests and concerns.

I begin by introducing the notion of vertical monadism as an analytical heuristic for deepening our understanding of urban topographies that transcend conventional horizontalism. From there I present the high-rise that constitutes the article’s main object of study through an ethnographic account of a meeting at the Maputo Municipality where all its residents were convened to discuss the use and misuse of collective spaces. After outlining the historical genealogy of rooftop occupations in Maputo, I return to the high-rise to flesh out in detail how internal differentiations establish a kind of precarious stability which feeds on itself. Towards the end of the article I relate the findings on rooftop autophagy to the concept of ‘juxtacities’ proposed by the editors in the Introduction to this special issue.

From Horizontal Urbanism to Vertical Monadism

In a very concrete way, rooftop spaces offer a different perspective on the city. From the street-level, the city emerges as a horizontally stretched out landscape of economic relations, physical movements and material connections, many of which are never to be seen (Dolan and Rajak 2018; Larkin 2013; Simone and Pieterse 2017; Stasik 2016). But what might elevation mean, to cite Bauman, ‘in an age of the horizontalization of world views?’ (2000, p. 4). To be sure, the study of urbanization processes in cities throughout the world and in the Global South in particular continues to be dominated by a ‘notable *horizontalism*’ (Graham and Hewitt 2013, p. 73, italics in original; see also Graham 2018; Jacobs 2006). Urbanization processes are often imagined based on a horizontal image of the city where planned inner-cities extend outwards into a number of suburban or peri-urban areas whose spatial organization is increasingly based on informal and irregular standards if any such exist at all. But, as recently argued by Graham and Hewitt (2013, p. 81), many cities in the Global South do increasingly reflect ‘complex relations between proliferating verticalized enclaves, prevailing networks of urban infrastructure and circulation and the wider majority-city of informal settlements’. Here, vertical urbanism has become a key vehicle for new forms of material segregation and social divides. In contrast to poor urban residents, who live and get by on street-level, wealthy urbanites can physically raise themselves above the chaos and disorderliness of the cities to live in detached verticalized enclaves in well-functioning and secure high-rises and skyscrapers. In Guatemala, for instance, poor and marginalized residents consider the verticality of the city as constituted by two realms: ‘The world below (*abajo*) and the world above (*arriba*)’ (O’Neill and Fogarty-Valenzuela 2013). And, as O’Neil and Fogarty-Valenzuela explain, ‘now almost everyone lives *abajo* while the rich live *arriba* (op.cit., p. 382). Indeed, even in the vocabulary of verticality, social privileges and power are sedimented as topographical markers of everyday urban life (Acuto 2010; Low 2003).

A number of recent studies on vertical urbanism specifically focus on the impact on the world’s cities of the growing number of monumental high-rises and skyscrapers that have been built for a financially privileged global elite (Acuto 2010; Adey 2010; Cwerner 2006; Graham 2018; Graham and Hewitt 2013). From this rich and nuanced body of empirical studies, we learn how, in cities striated with ‘vertical sprawl’ (Graham 2018, pp. 237–243; see also Hwang 2006), the socio-economic ordering of society seems to be one that is analogous to or even stenciled into the perpendicular volumetric extensions of the urban spaces. But I will nevertheless argue that the fact that new forms of vertical urbanism may render it impossible to ‘sustain some of the modern city’s more principled ideals of exchange and openness, of peaceful solidarity and collective responsibility’ (O’Neill and Fogarty-Valenzuela 2013, p. 379) does not by itself define how urban spaces are socially and economically stratified. In fact, while vertical urbanism does appear to reify contemporary forms of privilege with spatial properties (Harris 2011), it has been central to the ideological and physical development of modernist city-planning throughout the last century. Consider in this regard Le Corbusier’s reflections on verticality in ‘The City of To-Morrow and Its Planning’ written in 1927:

Thenceforward, instead of a flattened-out and jumbled city...terrifying in its confusion, our city rises vertical to the sky, open to light and air, clear and radiant

and sparkling... Our city, which has crawled on the ground till now, suddenly rises to its feet in the most natural way, even for the moment going beyond the powers of our imaginations, which have been constrained by age-long habits of thought (1987 [1927], pp. 280–281).

How and to what extent vertical urbanism is by itself intimately tied to wider forms of social stratification of society, with the privileged few residing high above the perils and uncertainties of street-level urban life, is therefore an empirical question. And it is one which needs to be determined by focusing on the particulars of individual buildings, their socio-technological dynamics and the often-intricate ways in which they are made and unmade as material conduits of social segregation (Pels et al. 2002). In Lloyd Jenkins's interesting study of one Parisian high-rise (2002), for instance, he interrogates the social, material and technological webs of connection and association through which a physical building comes to appear as a singular entity with durability and a set of formal qualities. Departing from conventional geographical approaches, which 'treat the individual building as a blank canvas on which another discourse is illustrated' (op.cit., p. 225), Jenkins suggests instead to consider physical structures, such as high-rises, as dynamic and unstable socio-material assemblages that are constantly permeated by other buildings, persons and spaces within and beyond the urban environments of which they are constitutive parts. Taking his cue from recent science and technology studies, Jenkins's analysis offers an interesting and rewarding perspective on physical structures as always being made. Their 'thingness', as it were, is constituted through multiple and overlapping relations and events, which continue to impinge on the fundamental qualities of the buildings and on social life in and around them.

The question we might ask ourselves, however, is whether a specific attention only to the 'permeability' of high-rises can sufficiently account for the multiple forms of social differentiations and physical divides that are made and unmade on the 'inside' of the buildings. For even though it may be argued that any physical structure comes into being as a manifestation of a 'diverse network of associates and associations' (Jacobs 2006, p. 11), my argument will be that this does not by itself render analytically visible the qualities and dynamics of those socio-material arrangements, which give to the singular social differentiations and physical divides their efficacy and drive. As I will try to make clear in the following, there are to these socio-material arrangements a unique and restricted specificity, which needs to be understood on its own analytical terms. Similar to other sub-Saharan African urban contexts, Maputo's apartment high-rises do surely reflect and refract entrenched political and economic legacies of colonial and post-colonial ideological regimes (De Boeck 2011, 2015; Huchzermeyer 2007). But that does not by itself make the apartment buildings into fractals of (Batty and Longley 1994; Eglash 2005) nor reduce them to nodes or sites in a wider system (Latour 1996, 2005). While a focus on a building's permeability is a useful and important analytical prism for identifying the (structural, spatial, temporal) relational work that goes into its making, then, the outside needs to be heuristically 'cut off' (Strathern 1996) in order to investigate the social and material aggregations through which interior forms of differentiations and divides are elicited.

To heuristically cut the flow of relational movement between the building's inside and outside essentially means to consider it as a monadic entity defined by an 'internal finality' (Leibniz 1991, pp. 58–59). In Leibniz's discussion on subjectivity, we are

presented with the peculiar notion of the ‘windowless monads’, which can initially be defined as soul-like substances whose perceptions come from within. The world we live in is already predetermined by God and is therefore essentially ‘folded’ into the subject in order for him or her to incarnate and express it. This means that there is no need to look outside oneself in order to bring the world into existence for ‘it is us who bring this world into actual existence through our inner perception of it’ (Lærke 2010, p. 30). This relationship between the subject and the world that is enfolded within it is what Leibniz captures with the notion of the windowless and doorless monad. For our present purpose, however, it is Deleuze’s later work on Leibnizian monadism that is of particular importance (Deleuze 1993; see also Lærke 2010). In Deleuze’s reading of monadism in Leibniz, each subject is constituted by the point of view it has on the world. Crucially, however, this should not be taken as an indication of the subject’s unique individuality. The point of view—the perspective—is a function of the world while the individual is the subject that perceives or expresses the world from this particular location. The subject cannot therefore be considered as ‘having’ a point of view, which would imply the existence of a pre-given subject. Rather, as an enfolding of the exterior world, the subject ‘is’ a point of view. In ‘The Fold’, Deleuze tells us that,

To the degree it [the subject] represents variation or inflection, it can be called *point of view*. Such is the basis of perspectivism, which does not mean a dependence in respect to a pre-given or defined subject; to the contrary, a subject will be what comes to the point of view, or rather what inhabits the point of view (1993, p. 19, italics in original)

Diverging from Leibniz on this point, Deleuze thus claims an ontological priority to the world beyond the individual substances that make it up. Whereas in Leibniz, the world is composed by monadic perceptions, in Deleuze it is a virtual and pre-individual source of monadic content, as it were (Wilkins 2008, p. 172).

Vertical monadism, then, refers to the analytical ‘cutting off’ of the physical building from the outside world in order to heuristically allow interior differentiations to play themselves out. If, as Deleuze claims, each monadic perspective constitutes a point of inflection of an infinite system of differences (1993, p. 60), it would imply that the dynamics of that system can be explored precisely by sticking to the workings of the monad itself. While there are no deeper truths to be gained except the variations elicited through individual perspectives (cf. Fraser 2006, p. 131), these do represent the entirety of the system. Given that the monadic perspective is a ‘living mirror... which represents the universe from its own point of view’ (Leibniz 1989, p. 207), it means that a point of view will only appear as such when it manages to reflect the fundamental dynamics of the wider system of which it is but a momentary variation.

Dona Susana’s Dreams of a Rooftop Apartment (Part 1)

On the morning of 26 September 2018, all residents living in the high-rise on Rua Salvador Gabriel 55 in the old colonial city centre of Maputo were summoned for a meeting at the municipal Department of Urbanization and Construction (DUC). A few

days earlier, a resident living in the high-rise, dona Susana,⁴ had approached the head of the Section for Condominiums (*Repartição de Condomínios*) at the DUC, Lucas Rufasse, and requested a visit to the building. Based on their brief conversation, Rufasse decided that instead of a visit, a collective meeting was required in order to analyse the fraught situation.

The meeting began at nine o'clock and within a few minutes all thirteen attending residents were seated in a semicircle that opened up towards one end of the room where Rufasse and his two juridical colleagues, José Dias and Gabriel Vilanculos, were standing. Dias welcomed everyone and apologized for the delay before explaining the main reason why the residents were summoned for the meeting:

I will not be mentioning any names but someone made a very serious accusation (*denúncia*). Apparently, there are illegal constructions (*obras ilegais*) in your building's collective spaces (*espaços comuns*) and that creates conflicts. Because of these illegal constructions, there are now outside people (*pessoas estranhas*) living in the building and we want to know about that.

Dias encouraged all residents to voice their opinions during the meeting but asked Remane, the head of the Residents' Committee (*Comissão dos Moradores*), an informal organization constituted by residents from all apartments in the high-rise, to open the discussion.⁵ In a low voice Remane thanked the DUC for having organized the meeting and then summed up what he considered as the main issues to be discussed. 'Yesterday I went up (to the rooftop) to inspect the informal constructions myself and there is no doubt that we will be having serious problems in our building very soon... The main problem is simply that the collaboration between the residents is very weak (*fraca colaboração*)'. An elderly woman, who was sitting close to Remane, was moving impatiently around on her chair and looked visibly upset. Dias asked her to present her concerns. The woman, Elisa, had been living in the building for more than 30 years without ever having had to involve the authorities in matters pertaining to the building. In fact, as Elisa saw it, these problems were caused by 'ambitious persons' (*pessoas ambiciosas*) who were thinking first and foremost about themselves and not about the collective.⁶ Elisa concluded her brief statement by encouraging the person, who had initially raised these problems in a public forum to speak up. Dias went around the room asking people one by one to voice their opinions and concerns but the following four persons limited their interventions to saying that they also wanted the person having first brought their internal problems to the municipality's attention to speak up. After a few moments of silence, a woman sitting at the far end of the room

⁴ All personal and place names are pseudonyms.

⁵ From Decree 17/2013 (Conselho de Ministros 2013), which specifies the juridical framework for condominiums, it appears that a 'residents committee' (*comissão dos moradores*) can be responsible for administering apartment buildings (Art. 30). Since the Residents Committee at Rua Salvador Gabriel 55 was never registered with the municipal notary, however, it does not have formal legitimacy. In other words, there is no formal entity responsible for the administration of the apartment building. For a comparative analysis of the importance and restricted powers of informal residents' associations in Luanda, Angola, that 'function inside the government but outside the law', see (Croese 2015:417).

⁶ To most residents, involvement by formal authorities was considered as potentially threatening the stability of their occupancies and should therefore be avoided unless it was absolutely necessary.

made a small nod with her head to Dias, apparently indicating that she wanted to say something. As I would soon learn, this was dona Susana, the person identified by Elisa and several other residents as having first approached Rufasse about the situation illegal constructions on the building's rooftop.

Dona Susana: 'Everything has to do with the collective spaces and I still think that they are wrongly distributed. The divisions are not right! The municipality asked us to try to resolve these problems among ourselves. But that information was not disseminated to everyone because I suffered reprisals (*represálias*) from a resident who felt violated (*lesado*) from me having mentioned her house to the people here at the municipality. But it wasn't like that. I didn't mention any names! I simply said that there were illegal constructions being made in the collective spaces... My focus has always been clear because I need an annex (*dependência*). When I bought the apartment, they told me that I would also have access to an annex at the rooftop. If I had any doubts about that, I could just check the building's certificate of collective property (*certidão de bens comuns do prédio*). So, I actually did check the certificate and when I did, I panicked! I admit that I panicked. But listen up, people! It is not just dona Susana who wants a rooftop house. There are many people in the building who want that'.

Susana handed a pile of documents to Vilanculos, who flicked through the many pages to find the certificate that she had mentioned. Issued by the Maputo Real Estate Registry, a department under the Ministry of Justice, the certificate listed all collective property in the building. Among several items mentioned in the certificate, there were four toilets in the backyard, two storage rooms at the rooftop and, of particular importance, three additional storage rooms in the backyard and eight small rooms on the rooftop initially built for servants working for the former Portuguese owners prior to Independence in 1975. As Vilanculos quickly determined, all of these rooms were collective spaces and so they could not be individually owned.⁷ The reason why dona Susana had apparently 'panicked' when reading the certificate, then, was because she realized that she could not formally claim ownership to an annex. As Vilanculos went on to carefully explain, if dona Susana had initially been told that her apartment also included access to an annex that she could use in whatever way she found appropriate then she had been deceived by the former owner. Rufasse, who had so far been taking notes, moved to the middle of the room. 'Listen, people! All of this is collective space. All of it! (*Tudo!*)'. Rufasse made a small pause while looking directly at dona Susana. 'And the municipality does not authorize constructions in collective spaces. If people are already living there, that is another matter. But the starting point is that all of it is collective space'.

Remane raised his hand and moved a step forward. 'I wonder what we are supposed to do then... What often happens is that a person sells an apartment and moves up on the roof assuming that the room up there is his own space'. Rufasse shook his head and moved a pointed index finger from side to side. 'But that is not our responsibility to figure out. That is for *you* to do! The space is all yours. You can make rents from it... rents, which might benefit the building. Our objective as municipal institution is to avoid hurting anyone'. Remane insisted: 'But I don't think that anything can be done without hurting someone. There are already people living there, you know...'. Before

⁷ According to Article 9 of Decree 17/2013 (Conselho de Ministros 2013), collective spaces in a condominium cannot be 'alienated or divided' by apartment owners.

Rufasse could respond, dona Susana took the word. ‘I have one question regarding the rooftop! I don’t think that it was fair that we kicked out a person, who didn’t have a place to stay. But, at the same time, certain apartment owners occupy most of the rooftop. I think that the municipality should notify these people!’. Dias was standing next to dona Susana. Without looking directly at her, Dias softly asked if she was suggesting that the people living on the rooftop should be evicted. ‘I don’t use the word “eviction”’, dona Susana retorted. ‘But it is not fair! The people who occupy rooms on the roof already have apartments in the building’. Vilanculos made a hand gesture towards dona Susana to make her stop talking. ‘Listen! Our children are going to fight over this if we just close our eyes (*fechar os olhos*). Those people who live there have to know that it is collective space. And if there are people living on the rooftop, who have already sold their apartments, then they are no longer part of the building. If they don’t accept your decision then you can take them to court (*tribunal*)’.

A final decision was made by Rufasse that the residents had to figure out among themselves how to solve the problem regarding the use of collective spaces and return to the DUC with a response within 90 days. On the way out of the meeting room, Fatima leaned in towards Vilanculos and almost whispered: ‘There are horrible people living in the building, you know... People who refuse to contribute to the collective no matter what happens’.

The Emergence of Rooftop Occupations

In February of 1976, less than a year after Mozambique’s Independence, the government nationalized all dwellings not used by owners as a family residence (Jenkins 1998). An immediate outcome was that the Frelimo government suddenly had to manage approximately 80,000 residential units of which circa 50% were in Maputo alone (Jenkins 1993).⁸ APIE⁹ was therefore set up under the Ministry of Public Works and Housing to administer the nationalized housing stock and especially the crucial albeit complicated task of collecting rents.¹⁰ From the beginning, APIE was overwhelmed by the magnitude of its tasks and responsibilities. It had little or no administrative and financial autonomy, the legal framework that it was supposedly guided by was both inconsistent and extremely complicated, and the data needed by the officials to carry out even the smallest everyday tasks was lacking (Jenkins 1998). As Morton (2018) explains, it did not take long for APIE to become known in the public for its poor performance and ‘outrageous levels of corruption’. In 1980, the first of several attempts was therefore made to strengthen APIE’s institutional framework but to this day it has remained hampered by political negligence, widespread corruption and lack of administrative resources.

⁸ The precise number is uncertain (Morton 2018) but according to a survey made by APIE in March 1992, the total registered stock amounted to 80,406 units of which 41,150 (51%) were in Maputo (Jenkins 1998).

⁹ The Department for the State’s Real Estate Property (*Administração do Parque Imobiliário do Estado*). Even though APIE was in charge of the nationalized housing stock from 1976 and onwards, it was only legally institutionalized in 1990 with Decree 29/90 of 28 November (Simango 2015).

¹⁰ The minimum rent was (in 2015 currency) as follows: 680 MZM for a 1-room apartment; 980 MZM for a 2-room apartment; 1100 MZM for a 3-room apartment and 1400 MZM for 4-room apartments and above (Simango 2015).

In 1987 Mozambique introduced an economic rehabilitation programme, the so-called PRE¹¹, aiming to halt the economic regression, reduce inflation and promote market liberalization and privatization of state-owned assets (Castel-Branco 2015). As an immediate result of the implementation of the economic rehabilitation programme, rents were increased by 50% in 1988 and again by 50% in 1991 but without significant improvements of APIE's economic capabilities. At the Fifth Party Congress in 1989, Frelimo abandoned all political talk of Marxist-Leninism and focused instead on paving the way for a genuine market economy (Hall and Young 1997, p. 202). These discussions lead to a seminar on housing policy in July 1990 and then, finally, in January of 1991, Law No. 5/91 was passed, which allowed APIE to sell nationalized apartments to tenants (Sidaway 1991, p. 256). The juridical administration of condominiums was specified with Decree 53/99 and revised with Decree 17/2013 (Conselho de Ministros 1999, 2013). Through these legal measures, ownership of private property in a condominium became subject not just to the juridical framework defined by national laws but also to the internal regulations of a private collective. As argued by Chipkin (2013, p. 229), in such situations, where 'the rights of private property have been grafted onto a regime of communal ownership... individual property rights are exercised in and through a system of collective control and management'. The condominium can therefore be considered as a peculiar hybrid urban form, which fuses two registers of rights, namely those pertaining to private property and those pertaining to the sharing of common spaces and facilities.

'I knew that APIE was in need of money but back then no one could have imagined that one day the government would decide to sell houses to the people!' José Chichava, the head of APIE from 1980 to 1983, was still puzzled by the decision to allow market forces to determine the mechanisms of getting access to accommodation in the cities. I met Chichava in the fall of 2019 to discuss the explosive growth of rooftop occupations and his opinion was clear-cut: 'The rooftop phenomenon emerged as a consequence of the government's decision to sell houses to the Mozambicans!' This assumption was widely held both among former and present state cadres and residents who lived in the former nationalized high-rises during the early 1990s. José Mucavele moved to Maputo in 1976 and began working as a block chief (*chefe do bloco*) in the neighbourhood of Malhagalene¹² in the early 1980s. On a hot spring day in 2018, he took me on my first tour around the neighbourhood while explaining how people began to occupy the rooftops. 'When the state handed over (*entregar*) the buildings to the residents, that's when they started moving up on the roofs... They could put someone else (*colocar*) in their apartment and earn something from that'.

While the growth of rooftop occupancies has exploded since the privatization of the housing stock in 1991, some rooftops were already occupied before then. Arnaldo Simango, the previous head of APIE, recently did a study of the history and current situation of Maputo's rooftop occupations (2015).¹³ As Simango, explains in his thesis,

¹¹ *Programa de Reabilitação Económica* (Economic Rehabilitation Programme).

¹² Malhagalene is an urban neighbourhood in Maputo, which mainly consists colonial apartment buildings.

¹³ Despite the massive growth of rooftop occupations, the only comprehensive study of the phenomenon is the survey made by Arnaldo Simango in preparation of his BA thesis. During my ethnographic fieldwork in Maputo, I tried several times to get in contact with Simango but he never replied to my emails and text messages. After leaving Maputo in the early fall of 2019, I discovered that the probable reason why Simango did not respond to my calls was that he had been imprisoned on charges of corruption (<https://www.jornalnoticias.co.mz/index.php/2018-05-04-10-20-41/89130-ainda-o-desvio-de-fundos-no-inss-mais- dois-arguidos-recolhem-a-cadeia>).

after a series of disastrous floods in 1977, the Frelimo government encouraged disaster victims to occupy whatever spaces were available in the nationalized buildings.¹⁴ Hence, ‘(t)he occupations of rooftops, annexes and garages were massive and they were ‘legal’ given the situation of the disaster...’ (op.cit., p. 45; my translation). With the privatization of the housing stock, however, this situation suddenly changed. In order for the state to ‘alienate’ (*alienar*) individual housing units, all physical spaces had to be registered and accounted for and that abruptly transformed the status of rooftop occupants from legal occupants to illegal squatters. A plan was developed to resettle all residents who were now occupying rooftops, annexes and garages illegally to Marracuene.¹⁵ Through the Housing Promotion Fund (FFH)¹⁶, 100 houses were built but many of these ended up being allocated to residents from the local area in order to resolve local conflicts over land rights.

Today it is impossible to determine the scope of rooftop occupations in Maputo. As noted, no comprehensive study of the situation has ever been made by state or municipal agencies nor are there any policies or administrative strategies, which aim to alleviate the growing number of problems that are being caused by the rooftop occupations. Still, from Simango’s recent study, we do get an initial sense of the situation. Based on his archival studies and field observations, Simango suggests that there are approximately 6000 ‘residential units’ on rooftops, in garages and annexes, what he defines as occupations of ‘special informality’ (*informalidade especial*). The Mozambican National Institute of Statistics’ 2007 census sets the median number of residents in informal housing units to five persons and therefore Simango estimates that there might be 30,000 residents living in ‘special informal occupations’. Using a typology introduced by APIE in 1988 of dividing the city into three zones of increasing levels of urbanization, Simango finds that the number of rooftop occupations is highest in the most urbanized areas of the city. A total of 442 ‘special informal occupations’ were identified during his field research of which 197 are rooftop occupations and 123 (56.94%) of these located in the most urbanized zone of the city (op.cit., p. 64). Simango does not give us the precise percentage but we are told that the rooftop constructions are generally one- or two-room cement units. Most of these (95.9%) have had toilets installed which have been connected to the buildings’ septic tanks but only 35.75% have running water whereas 60.41% use buckets to get water from a public faucet. Finally, of the 442 interviewed residents living in ‘special informal occupations’, 135 (30.5%) confirmed that they own the place.¹⁷ Several of these respondents also admitted that they still owned apartments in the buildings, which they moved out of ‘because life was very expensive’ (op.cit., p. 55). Simango does not mention this specifically, but based on my own research I would expect that these residents have probably sublet their apartments in order to make an additional income.

Dona Susana’s Dreams of a Rooftop Apartment (Part 2)

A few days after the meeting at the DUC, I decided to visit the high-rise on Rua Salvador Gabriel 55 to get an immediate sense of the place and hopefully reconnect

¹⁴ See (Tomás 2015) for an insightful discussion of a comparable process in Luanda.

¹⁵ The Marracuene District is located in the Maputo Province.

¹⁶ *Fundo para o Fomento de Habitação*.

¹⁷ A total of 185 respondents claimed that they rented it (41.9%), 99 (22.4%) were ceded and 23 (5.2%) borrow the place of occupation.

with some of the residents. Coming from Avenida 24 de Julho, which is one of the city's main arteries, the high-rise on Rua Salvador Gabriel 55 is located at the road's highest peak just before it descends towards Avenida Eduardo Mondlane. Once painted white with red balustrades in front of each of the sixteen apartments, decades of neglect have given to the building a certain air of fallen beauty. As I was told by Júlio Carrilho, who was Minister of Public Works and Housing from 1975 to 1978, when it was first built, the quality of the high-rise was impeccable but since Independence in 1975, it has not been maintained except for minor repairs and patches.

The main entrance was on the right side of the three-floored building where a wide staircase took me to narrow corridors on each floor, which was where all the apartments had their main entrances. In many high-rises built during the colonial era, there is access to the rooftops through a separate staircase in order for the residents not to have to run into their servants outside their apartments. In Rua Salvador Gabriel 55, however, the roof is accessed via the main staircase and I soon ended up there. The doorway leading to the right side of the roof was bricked up so I went out on the left side facing the backyard where I could see the two annexes and the two garages. The oblong open space continued until the far end of the building. It was divided into four rectangles by 30-cm-high traversing cement beams, which also served to delineate small front terraces for the four individual rooftop houses. On each terrace, residents had put up wooden tables, plastic bowls and a variety of plants in pots and buckets. A cement sink for washing clothes was standing on one of the two middle terraces. Apparently, it had been used recently because the floor around it was filled with water and there were clothes hanging from washing lines going across the open space from the houses to the railing. The semi-attached houses were covered with zinc roofs, which residents had stabilized with cement blocks, tires and stones in order to prevent them from flying off during periods with heavy wind. From the raw plastering of all outside walls, it appeared that the wooden doors and window frames had been put in at a later stage. Each house had been painted separately in different colors but after years of rain and tropical humidity, they had acquired an almost identical damp-spotted look with smudges of more recent cement around doors and window frames.

During the following days and months, I would come to learn that this left side of the rooftop was occupied by three different families whereas only one family lived on the right side. Sixty-five-year-old Alfredo Cumbuzza, the former head of the Residents' Committee, was offered an apartment in the building shortly after Independence in 1975. He stopped working a few years ago and in order to maintain a small income, he decided to rent out his apartment and the annex in the backyard that he was also occupying, while moving up on the roof with his family. His 24-year-old son, Leo, was initially staying in Alfredo's living room but Jaime, who was a good friend and neighbour still living in an apartment on the third floor, invited Leo to use his room on the roof, which was located next to Alfredo's. Rita lived on the far end of the left side of the roof with her three sons. She had never owned or rented an apartment in the building but 30 years ago, her husband was staying in a room in his cousin's apartment on the first floor and he managed to get them a house on the rooftop. Rita's husband now worked in Xai-Xai but she had not heard from him in 4 years. Amaral moved into the building at the same time as Rita. His now 26-year-old son, Nelson, was born in the building and moved up on the roof when his father decided to sell the apartment and

move to the neighbourhood of Mahotas¹⁸, Candida moved directly into a rooftop house in 1994 with her husband, who unfortunately died of tuberculosis a few years later. Initially she paid APIE a monthly rent but, as Candida remembered it, APIE soon decided that all rooftop occupants should be resettled to a neighbourhood on the outskirts of the city. That did not happen and, since then, she was left alone by state and municipal authorities. The fourth room on the left side was vacant. It was initially occupied by Regina, who later allowed Salima to live there. Salima had been living with her husband and two daughters in an apartment on the second floor. After returning from a visit to her family in Cabo Delgado in the northernmost region of Mozambique, Salima found all her belongings in the hallway and another person living in her apartment. Apparently, her husband had sold their apartment contract¹⁹ to someone else and moved to Matola²⁰ to live with another woman. When Regina realized that Salima and her daughters had nowhere to live, she offered the rooftop house to Salima until she could find a permanent place to stay. However, as Salima did not manage to find another place to live, Regina eventually got the Residents' Committee to evict Salima.

It might be expected that these interweaving and often tension-ridden trajectories of past and current rooftop occupations would cause massive frictions and conflicts among residents living in the high-rise. Except for dona Susana, to whom I will return shortly, this was not the case. While it is illegal to occupy collective spaces without formal residency in an apartment, none of the registered residents (neither owners nor tenants) considered this to be a huge problem. When I visited Candida in her small one-room house on the left side of the rooftop, I commented that the right side was blocked. Candida explained that it was Alfredo Cumbuza who had bricked up the doorway. 'Each one takes care of their own life (*cada um cuida da sua vida*). We don't even know if Cumbuza has authorization to do that and we don't want to know because it does not affect us in any way (*não nós afecta de maneira nenhuma*)'.

In fact, the main challenge was the building itself. None of the old pipes had ever been replaced and the new plastic tubes, which the rooftop residents had connected to the building's existing system, were too fragile for regular use. Hence, every few days some apartment would experience 'infiltration of dirty water' (*infiltração de agua suja*) through the ceiling. These problems were further aggravated by the building's constantly leaking water tank standing on the roof and, especially, by the heavy recurrent rains, which caused the rooftop to flood. On my third visit to the high-rise, I was invited to have lunch with Fatima and her family. Fatima had lived in a three-room apartment on the second floor for 25 years, initially with her husband and when he died, she remained there with her two teenage sons. The former owner of the apartment, Ernesto, had access to an annex in the backyard, which he passed on to Fatima when he 'sold the keys' to her, so now she made a small income from renting it out to a young man who lived there by himself. During our lunch together, I noticed a huge blotch in a ceiling corner. Flakes of paint were hanging down from the ceiling and the cement appeared still to be wet. 'Yeah, we have problems with infiltration'. Fatima sighed and let herself

¹⁸ Mahotas is a peri-urban neighbourhood in Maputo.

¹⁹ Informal transfer of APIE contracts is known as 'selling the key' (*vender a chave*).

²⁰ Matola is the second largest city of Mozambique. Between 1980 and 1988, it was the sister-city to Maputo, the two constituting 'Larger Maputo' (*Grande Maputo*).

fall back in the chair. ‘There are problems on the third floor. And sometimes dirty water leaks down. Outside my apartment it’s dripping down all the way from the roof... We can’t hang clothes out to dry unless we put them under an umbrella... I talked to the woman on the third floor about it. She rents the place. And she didn’t even refuse that it was also her problem. She resolved the problem and even apologized to me’.

Not surprisingly, all the residents that I spoke to thought that the incidents of ‘infiltration of dirty water’ were incredibly annoying. The recurrent leaks constituted a latent health risk and gave to the most seriously affected apartments a thick and sweet smell of decay. But the infiltration of dirty water was also considered by most residents as an unavoidable consequence of living in a dilapidated high-rise. A more serious problem, however, was dona Susana having contacted the DUC about the rooftop occupations and her stubborn insistence on being entitled to an annex or a rooftop house. ‘We should be looking for solutions and not for problems’, Jaime said when I met him in the stairway. Still on holiday from his work as an accountant, Jaime had plenty of time to chat about the situation. ‘Before Susana approached the municipality, there was peace here. Never 100% but we worked things out among ourselves. Why did she have to contact the municipality? If she wanted more space, she should have talked to Remane (the head of the Residents’ Committee)’. Later in the day, I visited Candida on the rooftop. She was sitting outside her house smoking a cigarette while looking out on the city. We talked about Susana’s suggestion that all rooftop residents should be ordered to leave. ‘To her, we are not persons (*não somos pessoas*)’. Candida leaned forward and shook her head. ‘She is a person because she lives in a proper house’.

According to dona Susana, however, it was not her ambition to evict anyone. But because she owned an apartment, she should be allocated an annex or a rooftop house. ‘Life is hard, you know’. Dona Susana made a long pause. ‘I also want an annex so I can do something with my life’. I asked her if she wanted an annex to rent out. ‘Yes! Yes! To rent out. Or maybe I could live there and rent out this apartment’. Dona Susana lived by herself in a sparsely furnished three-room apartment. She received a small pension from her late husband, who had been with the national road administration all his life. After having worked for more than three decades as a seamstress, in 2014 dona Susana retired and was now spending most of her time making beautifully draped tablecloths, which she sold at an informal market in the nearby neighbourhood of Alto Mãe. Even with the additional income from selling tablecloths, however, it was not enough to get by. With a rooftop house or an annex, however, she might be able to make a small but crucial addition to her meagre income. As I was leaving her apartment, dona Susana held my arm for a moment. ‘The distribution of annexes in this building is not fair! Fatima has a huge annex in the backyard and she is the one who accuses me of causing trouble for everyone!’.

Rooftop Autophagy: Juxtacities and the Production of Internal Differentiations

For the remainder of this article, I want to focus on the internal differentiations that have emerged through the conflicts described above. It will be my argument that these internal differentiations reflect a particular kind of restricted specificity, which needs to be understood on its own analytical terms. This implies a focus on processes of what I

define as ‘rooftop autophagy’, which connect and stabilize otherwise detached positions, spaces and residents.

In the Introduction to this special issue, the editors propose the notion of ‘juxtacities’ as an analytical neologism, which highlights the generative qualities of simultaneous but contrasting socio-material phenomena in cities today. ‘The notion of *juxtacities*’, the editors write, ‘offers us a way to recognize, investigate and theorize the dynamic qualities of multiple urban divides in their specific contexts; that is, to focus on the productive juxtaposition of difference in urban spaces: both difference-as-distinction, and difference-as-bridge’. To take one example, we might think of the ways in which different socio-political orientations, say, ideologically driven political agendas and heterogeneous forms of speculative real estate investments—as manifested in the building at Rua Gabriel Salvador 55—come together to create fundamentally unstable configurations of urban divides, but which nevertheless seem to stabilize over longer periods of time. Critical urban juxtapositions might also arise, I will argue, from contrasting registers of rights, such as those of collective use and management of shared spaces and those referring to the control and reproduction of private ownership (cf. Chipkin 2013). At the outset, such urban divides might fruitfully be understood as co-existing socio-material forces, which are inherently external to each other; they have different social rhythms and economic velocities but precisely through these differences, they invest the city with a particular kind of differentiating pulse. In António Tomás’s fascinating analysis of the management of apartment buildings in Luanda (2015), for instance, we learn how the privatization of the former state-owned housing stock carried on its back the possibility for new forms of social collectivities between residents, who were first and foremost interested in securing their individual ownership rights. And also from Luanda, Gastrow’s recent discussion of ‘DIY verticality’ (2020) unpacks the intricate ways in which the urban fabric is being held together through residents’ everyday attempts at stalling the eventual collapse of the city’s apartment buildings through makeshift patches and repairs. What happens, then, if we imagine such urban tensions and contrastive forces operating as internal differentiations (cf. Nielsen 2012)? In other words, what might be the purchase of considering ‘juxtacities’ as an analytics for capturing the ‘inside’ of an urban phenomenon so that its internal constitution emerges through the dynamic interplay of contrasting socio-material forces?

Very few if any of the residents living in the high-rise on Rua Salvador Gabriel 55 expressed any sense of responsibility regarding the building’s collective spaces. According to Remane, the head of the Residents’ Committee, there was always trash lying around and even simple maintenance tasks were ignored. Residents would park their cars in areas which were clearly designated for other purposes and two of the existing buildings in the backyard had been erected by residents without a permit. Furthermore, it was close to impossible to get people to pay the monthly contribution to the guard without Remane having to collect the money himself. Almost paradoxically, the only thing that could generate some kind of social collectivity for the residents was the recurrent problems with ‘infiltration of dirty water’ (*infiltração de água suja*). Although they never ceased to cause tensions, which occasionally erupted into overt confrontations and conflicts, the putrid incidents of *infiltração* were also the one thing that would make residents come together around a shared concern. Returning to the analytical vocabulary introduced by the editors of this special issue, *infiltração* was both ‘difference-as-distinction and difference-as-bridge’. In a very concrete way, it

invested the socio-material fabric of the building with a precarious stability, which was superimposed onto the fraught collective spaces. To the apartment residents, the annexes and rooftop houses, which were formally part of the building's collective spaces, seemed to only acquire social significance as possible extensions of their individual spaces. Both among the residents themselves and during our conversations, a recurrent topic for everyday small-talk was the past and current uses of annexes and rooftop houses and the fairness (or lack thereof) of their distribution. But even though there was constant talk of misappropriations of collective spaces, these rumours and implicit allegations had never been considered as a reasonable cause for involving external agents, such as the neighbourhood administration or DUC. That was at least the case until dona Susana approached Lucas Rufasse, the head of the Section for Condominiums at the DUC, and requested a visit to the building. For what dona Susana did was essentially to externalize something that most residents believed should be kept on 'the inside', as it were. Through the reactivated relation to the municipality, a defining feature of the socio-material configuration of the high-rise, namely the contested use of annexes and rooftop houses, ceased to serve as a generative 'engine' of internal differentiation. Instead, it was realigned with—or reconnected to, rather—the weaknesses of an administrative system, which had been profoundly incapable of providing access to secure accommodation for the poorest segments of the urban population. The precarious internal stability, which operated through recurrent incidents of *infiltração* and often tense negotiations about collective spaces, could no longer be maintained and the building came to appear more as 'an unstable assemblage that is intimately connected to and renegotiated by the surrounding buildings, streets, communities, and economies and the world beyond' (Jenkins 2002, p. 232).

As I have argued above, by heuristically 'cutting off' the high-rise at Rua Salvador Gabriel 55 from the outside in order for it to be figured as a vertical monad, it becomes possible to examine with greater analytical sensibility how internal differentiations play themselves out without at the same time losing sight of the city's economic topography and shifting rhythms (*pace* Crang 2001; Edensor 2010; Jacobs et al. 2007; Jenkins 2002). In this regard, the verticality of the building itself has offered certain analytical insights. The 'dirty water' seeps down through the physical structure and connects the different apartments and rooftop houses almost like the lifeblood of the building.²¹ It could also be argued that it is because of the vertical coordination of everyday life in the building that the rooftop houses remain both collectively ignored and socially salient when considered as potential extensions of private spaces. The rooftop is a constitutive element of the high-rise while also being located on its physical outside, and therefore its status can be negotiated. Still, while the play of internal differentiations does establish a kind of precarious stability, it also seems to gradually exacerbate the deterioration of overall social and material conditions in the high-rise. For even though the residents do manage to steer their way around the most serious social tensions that accompany the recurrent 'infiltration of dirty water', the pipes are not replaced, the leaking water tank has not been repaired and the trash is rarely removed. On my last visit to the building, I talked at length with Oscar, who has worked there as a security guard for more than 20 years. He should have received his monthly pay a week ago but Remane had still not managed to collect the 200 MZM from each household. 'There is

²¹ I am grateful to PhD researcher Carla Cortês, Aarhus University, for making this analogy.

no understanding (*entendimento*) in this building’, Oscar surmised. ‘There is no respect, you know. And now the light in the hallway has been out for more than a month. It’s a disgrace (*vergonha*)’. In this way, the study of vertical monadism adds to our knowledge of urban divides by taking seriously the inner workings of singular phenomena, such as a derelict apartment building. While a number of recent studies of comparable urban processes have convincingly documented the relational ‘permeability’ of the cities most hardened surfaces (Jenkins 2002; see also Gastrow 2020; McFarlane 2015; Lecomte 2013) and the capacity of speculative urban economies to carry the seed for new social arrangements (Anand 2017; Croese 2015; McFarlane 2015; Tomás 2015), vertical monadism emphasizes the (ontological, social, economic, political) specificity of particular forms of differentiations and divides. A focus on vertical monadism does therefore *not* imply any detachment from external forces. Instead, the heuristic ‘cutting off’ of the ‘outside’ offers an experimental probing of the qualities and inertness of singular differentiations, which may then serve to qualify broader analytical readings of different urban situations and processes.

Let me therefore finally suggest to consider the dynamics of this internal socio-material system as a kind of ‘rooftop autophagy’. Literally, autophagy means self-devouring and refers either to the process of inflicting harm to oneself by consuming portions of one’s own body (autophagia) or the orderly physiological degradation of cellular components (Klionsky 2008). Particularly in relation to diseases, autophagy has been considered as an adaptive response to stress, which may promote the survival of cells but also, in other instances, cell death and morbidity. Returning to the way that differentiations and divides play themselves out internally in the high-rise on Rua Salvador Gabriel 55, it can be considered as a dynamic system, which essentially feeds on itself. Plastic tubes from the rooftop houses are attached to the building’s old zinc pipes and in most cases the connections are made to the apartments, whose owners initially occupied the rooftop houses. This means that tenants living in the apartments have to live with the consequences of the *infiltração* from rooftop houses, which belong (or have belonged) to the apartment owners. At the same time, collective spaces continue to be considered almost exclusively as potential extensions of private spaces rather than as a shared resource. In effect, the system ends up feeding on itself through internal consumption and excessive usage of spaces and resources. For years, the dynamics of this system have allowed for its precarious stabilization not least because it has operated through and even accommodated the disjunctive juxtaposition and intertwinement of seemingly opposing elements: owning vs. renting apartments; informal vs. formal authority; internal vs. external connectivity. But because of the worsening of overall physical conditions through recurrent incidents of *infiltração* and the growing tensions around the system’s inbuilt contested appropriations of collective spaces, it also seems to be gradually exhausting its own resources.

Conclusion

For an ethnographic study of one dilapidated high-rise in the inner-city of Maputo, vertical monadism opens up to an experimental probing of interior socio-material arrangements and the differentiations and divides that hold them in place either provisionally or for longer periods of time. It is a way of taking seriously the decisive

topological qualities of a built environment, whose permeability is unquestionable (pace Jenkins 2002), but which is also fundamentally structured by differentiations and divides emerging only on the ‘inside’ of the building itself. Based on the ethnographic findings presented above, I have suggested to consider the internal socio-material dynamics in the high-rise at Rua Salvador Gabriel as ‘rooftop autophagy’, which has established a kind of precarious stability by feeding on itself. To be sure, such internal dynamics cannot be understood without proper socio-historical contextualization of urban development in Maputo. But this wider context needs to be experimentally ‘cut off’ in order to appreciate the intricate ways that divides and differentiations play themselves out, in and through the social and material structures of the building. By doing so, I would argue, it becomes possible to re-engage in a more nuanced discussion of the administrative weaknesses and lacking political prioritization of the city’s urban management system. Rooftop autophagy is, indeed, a citywide phenomenon. According to Rufasse, the head of the Section for Condominiums (*Repartição de Condomínios*) at the DUC, 90% of all requests from residents are about problems with *infiltração* and misuse of collective space. During my many visits to inner-city rooftops, I saw nothing which did not confirm Rufasse’s assumption. In all the high-rises that had rooftop occupations, there were serious problems with *infiltração* and ongoing discussions among apartment residents about the use and misuse of rooftop houses and annexes. It could therefore be argued that rooftop autophagy is a way in which the city has configured itself in a regularized way but one that is gradually exhausting its internal resources precisely by feeding on itself.

With the notion of ‘juxtacities’, the editors to this special issue have offered us an apt analytical tool for exploring the generative dynamics of urban differentiations. It suggests that tensions and contradictions might be an impetus rather than an impediment to the making of vibrant cities. In this article, I have expanded on the idea of ‘juxtacities’ through the notion of vertical monadism, which here involves an analytical ‘cutting off’ of an outside in order to heuristically allow interior differentiations to play themselves out. This exploratory move, I would argue, allows for a perspective on urban differentiations where the co-constitutive relationship between the former and their immediate social and material environment is given analytical priority. By emphasizing the verticality of this urban phenomenon, it has furthermore been possible to challenge conventional topographical understandings of the city, which continue to be based on a horizontal reading of the urban landscape.

Funding Information The research that this article builds on was supported by a grant from the Independent Research Fund Denmark for the research project ‘Middle Class Urbanism: An interdisciplinary study of the physical reordering of urban sub-Saharan Africa’.

References

- Acuto, M. (2010). High-rise Dubai urban entrepreneurialism and the technology of symbolic power. *Cities*, 27(4), 272–284.
- Adey, P. (2010). Vertical security in the megacity: legibility, mobility and aerial politics. *Theory, Culture and Society*, 27(6), 51–67.
- Anand, N. (2017). *Hydraulic City. Water & the infrastructures of citizenship in Mumbai*. Durham: Duke University Press.

- Batty, M., & Longley, P. A. (1994). *Fractal cities: a geometry of form and function*. London: Academic Press.
- Bauman, O. (2000). In the age of horizontalization. In A. Ireson (Ed.), *City levels* (pp. 4–5). Basel: Birkhauser.
- Castel-Branco, C. N. (2015). Growth, capital accumulation and economic porosity in Mozambique: social losses, private gains. *Review of African Political Economy*, 41(1), 26–48.
- Chipkin, I. (2013). Capitalism, city, apartheid in the twenty-first century. *Social Dynamics*, 39(2), 228–247.
- Conselho de Ministros (1999). Decreto No. 53/99 de 8 de Setembro. Maputo, Boletim da República, 1 Série, Número 36.
- Conselho de Ministros (2013). Decreto no. 17/2013 de 26 de Abril. Maputo, Boletim da República, 1 Série, Número 34.
- Corbusier, L. (1987 [1927]). *The city of to-morrow and its planning*. New York: Dover Publications.
- Crang, M. (2001). Rhythms of the city: temporalised space and motion. In J. May & N. Thrift (Eds.), *Timespace—geographies of temporality* (pp. 187–207). London: Routledge.
- Croese, S. (2015). Inside the government, but outside the law: residents’ committees, public authority and twilight governance in post-war Angola. *Journal of Southern African Studies*, 41(2), 405–417.
- Cwerner, S. B. (2006). Vertical flight and urban mobilities: the promise and reality of helicopter travel. *Mobilities*, 1, 191–215.
- De Boeck, F. (2011). Spectral Kinshasa: building the city through an architecture of words. In T. Edensor & M. Jayne (Eds.), *Urban theory beyond the West. A world of cities* (pp. 309–326). London: Routledge.
- De Boeck, F. (2015). The tower. A concrete utopia. Notes on a video-installation by Sammy Baloji and Filip De Boeck. In M. J. Holm & M. M. Kallehauge (Eds.), *Africa. Architecture, culture, identity* (pp. 84–88). Humlebæk: Louisiana Museum of Modern Art.
- Deleuze, G. (1993). *The fold. Leibniz and the Baroque*. London: The Athlone Press.
- Dolan, C., & Rajak, D. (2018). Speculative futures at the bottom of the pyramid. *Journal of the Royal Anthropological Institute*, 24, 233–255.
- Edensor, T. (Ed.). (2010). *Geographies of rhythm. Nature, place, mobilities and bodies*. Ashgate: Farnham.
- Eglash, R. (2005). *African fractals. Modern computing and indigeneous design*. New Brunswick: Rutgers University Press.
- Fraser, M. (2006). Event. *Theory, Culture and Society*, 23(1–2), 129–133.
- Gastrow, C. (2020). DIY verticality: the politics of materiality in Luanda. *City & Society*, 32(1), 93–117.
- Graham, S. (2018). *Vertical. The city from satellites to bunkers*. London: Verso.
- Graham, S., & Hewitt, L. (2013). Getting off the ground: on the politics of urban verticality. *Progress in Human Geography*, 37(1), 72–92.
- Hall, M., & Young, T. (1997). *Confronting Leviathan. Mozambique since Independence*. London: Hurst & Company.
- Harris, A. (2011). Vertical urbanism: flyovers and skywalks in Mumbai. In M. Gandy (Ed.), *Urban constellations* (pp. 113–118). Berlin: Jovis Verlag.
- Huchzermeyer, M. (2007). Tenement City: the emergence of multi-storey districts through large-scale private landlordism in Nairobi. *International Journal of Urban and Regional Research*, 31(4), 714–732.
- Hwang, I. (2006). When does stacking become vertical sprawl? *WIT Transactions in Ecology and the Environment*, 93, 283–293.
- Jacobs, J. M. (2006). A geography of big things. *Cultural Geographies*, 13(1), 1–27.
- Jacobs, J., Cairns, S., et al. (2007). A tall storey ... but, a fact just the same’: the red road high-rise as a black box. *Urban Studies*, 44(3), 609–629.
- Jenkins, P. (1993). *Urban development and housing in Mozambique: a current analysis and bibliography*. Edinburgh: Edinburgh College of Art/Heriot-Watt University.
- Jenkins, P. (1998). National and international shelter policy initiatives in Mozambique: housing the urban poor at the periphery. In *Centre for Environment and Human Settlements, School of Planning and Housing*. Edinburgh: Heriot Watt University.
- Jenkins, L. (2002). Geography and architecture: 11, Rue du Consevatoire and the permeability of buildings. *Space and Culture*, 5, 222–236.
- Klionsky, D. J. (2008). Autophagy revisited: a conversation with Christian de Duve. *Autophagy*, 4(6), 740–743.
- Lærke, M. (2010). Four things Deleuze learned from Leibniz. In S. van Tuinen & N. McDonnell (Eds.), *Deleuze and the fold. A critical reader* (pp. 25–45). New York: Palgrave.
- Larkin, B. (2013). The politics and poetics of infrastructure. *Annual Review of Anthropology*, 42(1), 327–343.
- Latour, B. (1996). On actor-network theory. *Soziale Welt*, 47, 369–381.
- Latour, B. (2005). *Reassembling the social. An introduction to actor-network-theory*. Oxford: Oxford University Press.

- Lecomte, J. (2013). Beyond indefinite extension: about Bruno Latour and urban space. *Social Anthropology*, 21(4), 462–478.
- Leibniz, G. W. (1989). Philosophical essays, edited and translated by R. Ariew and D. Garber. Indianapolis: Hackett.
- Leibniz, G. W. (1991). Leibniz's monadology (an edition for students), trans. and ed. N. Rescher. London: Routledge.
- Low, S. (2003). *Behind the gates: life, security, and the pursuit of happiness in Fortress America*. London: Routledge.
- McFarlane, C. (2015). "The geographies of urban density: topology, politics and the city." *Progress in Human Geography*
- Morton, D. S. (2018). *Age of concrete: housing and the shape of aspiration in the capital of Mozambique*. Ohio: Ohio University Press.
- Nielsen, M. (2012). Interior swelling. On the expansive effects of ancestral interventions in Maputo, Mozambique. *Common Knowledge*, 18(3), 433–450.
- O'Neill, K. L., & Fogarty-Valenzuela, B. (2013). Verticality. *Journal of the Royal Anthropological Institute*, 9(2), 378–389.
- Pels, D., Hetherington, K., & Vandenbergh, F. È. È. (2002). The status of the object. Performances, mediations, and techniques. *Theory, Culture and Society*, 19(5/6), 1–21.
- Sidaway, J. D. (1991). Territorial organisation and spatial policy in post-Independence Mozambique in historical and comparative perspective. Department of Geography. London, University of London. PhD.
- Simango, A. E. (2015). Informalidade espacial na cidade formal de maputo. o caso dos terraços, anexos e garragens *Faculdade de Arquitectura e Planeamento Físico*. Maputo, Universidade Eduardo Mondlane. Mestrado em planeamento e gestão de assentamentos nformais.
- Simone, A., & Pieterse, E. (2017). *New urban worlds. Inhabiting dissonant times*. Cambridge: Polity Press.
- Stasik, M. (2016). "Contingent constellations: African urban complexity seen through the workings of a Ghanaian bus station." *Social Dynamics*, 1–21.
- Strathern, M. (1996). Cutting the network. *Journal of the Royal Anthropological Institute*, 2(3), 517–535.
- Tene, A. R. (2019). Mau uso e falta de manutenção: Cenários que chamam a si o fim de alguns prédios. Notícias, 16 September.
- Tomás, A. (2015). Mutuality from above: urban crisis, the state and the work of Comissões de Moradores in Luanda. *Anthropology Southern Africa*, 37(3–4), 175–186.
- Wilkins, A. (2008). Modes, monads and nomads: individuals in Spinoza, Leibniz and Deleuze. *Philosophy*, Stone Brook University. PhD thesis.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.