A Cosmopolitan Ghetto:

The Shifting Image of Kibera Slum From 'Flying Toilets' to a Centre for Metropolitan Innovation

By John M. Wambui | Opinion

Introduction

It has become customary, when conceptualising twenty-first-century urban landscapes, to describe them as existing in two states. The first state is one in which scholars of modern metropolises conceptualise them as new articulations of social, economic, and political identity. Scholarly consensus holds that these geographies and their growth are implicitly and explicitly linked to major social, economic, political, and ecological stability (United Nations, 2016). Their growth is closely connected to the three pillars of sustainable development: economic development, social development, and environmental protection (United Nations, 2014).

The development of cities provides a myriad of socio-economic benefits. Through the agglomeration process – concentration of people, resources, and investments – cities heighten the possibilities for economic development, innovation, and social interaction (UN/DESA, 2013). They concentrate key infrastructure assets which provide opportunities for diversified investments and labour provision, thus improving overall quality of life. The aesthetic values linked to the image of cities have modified the social rhythm through the transformation of social ideals, ties, lifestyles, and aspirations (Harvey, 2008). Cities are also central to political stability. Harvey, for example,

argues that no country has attained stability without experiencing urban growth. The growth of cities not only provides the promise of global social, economic, political, and ecological stability; it also offers the promise for social transformation (Harvey, 2008). This promise is, however, increasingly becoming overshadowed by the second state in which cities exist.

While the growth of cities offers a promissory note for social, economic, political, and ecological redemption, their rapid expansion brings a multitude of challenges. One of the defining elements of twenty-first-century urban development is the movement of rural populations to cities. Urbanisation, 'the gradual shift in the residence of human population from rural to urban areas', has become the most transformative development trend in the twenty-first century, especially in the Global South (United Nations, 2016; United Nations, 2018). Statistics suggest that 55% of the global population resides in urban areas today and this proportion is expected to increase to 68% by 2050 (United Nations, 2018). Approximately 90% of this increase is projected to take place in low and middle-income countries (LMICs), particularly in Africa and Asia. Studies show that the urban population in these regions has been increasing at a rate of almost 70 million persons per year (PSUP, 2016). This shift demonstrates the impact that urban development has on the reorganisation of the global social order. This has resulted in concerns among urban scholars about the sustainability of cities. These scholars view the current uncontrolled and unplanned trend in urban growth as being socially, economically, and environmentally unsustainable.

Concerns about the sustainability of cities are enlarged by the growing research on slums. UN Habitat defines a slum as a 'contiguous settlement that lacks one or more of the following five conditions: access to clean water, access to improved sanitation, sufficient living area that is not overcrowded, durable housing and secure tenure' (World Bank Group, 2016). This body of research highlights slums as symbolising the many facets of poverty, inequality, and deprivation in cities, especially in LMICs today (World Bank Group, 2016). Studies indicate that slums have been growing steadily and consistently in the last few decades. For example, in 1990 an estimated 689 million people lived in slums in developing nations. Today, the UN

estimates this population to be around 1 billion people, accounting for 1 in 8 people globally (Participatory Slum Upgrading Programme (PSUP), 2016). Since 2000, the global slum population has been growing by an average of six million people per year. Sub-Saharan Africa alone accounts for 56% of the total growth in the number of slum dwellers among the developing regions (PSUP, 2016; World Bank Group, 2016).

In developing nations, particularly in Africa, slums have become the contemporary image of the metropolitan lifestyle. The presentation of everyday experiences in slums provides accounts of social struggles, disenfranchisement, and disintegrating ecological structures against a backdrop of institutional failures and scarcity of means and resources. Slums have become equated with increased rates of urban crimes, poor health and nutrition outcomes, low literacy achievement, high unemployment rates, poor sanitation, and overall lack of access to reliable and decent human settlements. With more than half of the urban population in African metropolises residing in slums (see Figure 1 below), the image of the slum is a harsh contrast to the glittering illusion of urban promises held out but denied to many. The precariousness of urban slums, as highlighted by the growing body of research on urban poverty, offers the image of slums as a globalised allegory of failed modernisation, especially in the Global South.

Slums are not a new phenomenon in modern cities, having been well documented in the historical literature of Western metropolises predating the Industrial Revolution. Two dominant views of slums have governed this literature. The first is the traditional neoliberal view which conceptualises slums as geographies of urban decay. This articulation

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Almost ½ of Africa's urban population live in slums

Share of urban population living in slums, 2014 (%)

Figure 1: Share of Urban Population living in Slums in Africa (Urban Dynamics: Facts and Figures, 2015) p45)

regards slums as urban human petri dishes where social, economic, political, and environmental misery ferments. Scholars who use this construct perceive slums as interesting only if they affirm the ideas of disenfranchisement, precariousness, and social marginalisation (Dovey, 2012; Gilbert, 2007; Holston & Caldeira, 2008). Both the theoretical and practical discussions within this view focus attention on slums as symbols corresponding to chaos, disorder, and social and spatial illegitimacy.

Viewed within this framework, slums have been interpreted as decaying urban environments that do not correspond with the mainstream image of a city.

This view of slums has generated what Jane Jacobs calls a paternalistic approach to policy responses (Jacobs, 1992: 271). The urban renewal theories and policies which have emanated from this paternalistic narrative have often focused on eliminating slums through strategies such as forced eviction, clearance, resettlements, and slum upgrading projects (Dupont, Jordhus-Lier, Sutherland & Braathen, 2016; Kayizzi-Mugerwa, Shimeles & Yameogo, 2014). These methods have failed or have had limited success (PSUP, 2016). At best, such a method succeeds in shifting 'slums from here to there, adding its own tincture of extra hardship and disruption. At worst, it destroys neighbourhoods where constructive and improving communities exist and where the situation calls for encouragement rather than destruction' (Jacobs, 1992: 270–71).

Parallel to the neoliberal view, an emerging group of scholars has formed what I term the contemporary view of slums. This perspective conceptualises the development of slums as a process of social construction and reconstruction. Through this process, the urban marginalised populations compete for and appropriate resources and opportunities which are otherwise unavailable, inaccessible, or denied to them. Contemporary urban theorists view slums as forms of instant urbanity that highlight alternative ways of self-organisation among marginalised populations (Zappulla, Suau & Fikfak, 2014). They view them as places in which generative possibilities emerge out of desperation and deprivation. Informality, which is a defining characteristic of the identity of slums, is conceived as an 'organising logic, a system of norms that governs the process of urban transformation itself' (Heitzman, 2005). By highlighting the generative dynamism and vibrancy of the social and spatial alchemy of slums, contemporary urban theorists argue that informality offers an alternative structure of urban governance outside the formal structures (AbdouMaliq, 2004; Dovey, 2012; Gilbert, 2007; Holston & Caldeira, 2008; Neuwirth, 2006; Roy, 2011; Tavares & Brosseau, 2013; United Nations, 2014; Whyte, 1981; Yiftachel, 2009). This informal structure highlights the daily informal social experimentations which are marked by incremental adaptation and improvisation in the face of uncertainties (Thieme, 2017).

While these two perspectives differ in the way they theorise slums and ultimately in how they practically respond to their existence, they nevertheless face the same conceptual and practical dilemma. Modern slums are not only expanding in size parallel to the evolution of cities, they are also growing in their population density. By 2050, the global slum population is projected to reach about 3 billion people. It is worth emphasising that much of this growth has been projected to take place in Africa, especially in Sub-Saharan Africa. The question that has been problematic to both neoliberal and contemporary urban theorists is how states – given the scarcity of means and resources – can successfully manage the threats and challenges that slums present to the sustainability of cities and their social infrastructure.

Neoliberal scholars stick with the grand old ideas that the only logical way of addressing the challenges of slums is by eliminating them. Contemporary scholars, on the other hand, while acknowledging the social, economic, political and ecological challenges which are characteristic of many slums, emphasise the need to embrace slums as new forms of social identity and alternative human settlements in modern metropolises (Harvey, 2008; Neuwirth, 2006; Roy, 2011; UN-Habitat, 2003). This is by no means to say that the precariousness of slums should be condoned or normalised. What contemporary theorists assert is that, given the current trends in both the growth of the city and the persistence of slums, it is imperative to embrace the idea that slums are increasingly becoming part and parcel of the new urban identity, particularly in LMICs. Therefore, there is a need to recognise them as places in which residents use their ingenuity to create connections, adaptations, and survival tactics in modern metropolises where they are disenfranchised (Bayat, 2007; Holston & Caldeira,

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2008; Holston, 2008; Jacobs, 1992; Whyte, 1943). To overcome slums, contemporary theorists postulate that:

> '...we must regard slum dwellers as people capable of understanding and acting upon their own self-interests, which they certainly are. We need to discern, respect, and build upon the forces for regeneration that exist in slums themselves, and that demonstrably work in real cities. This is far from trying to patronize people into a better life, and it is far from what is done today' (Jacobs, 1992: 270–71)

This analysis invites the examination of different ways in which the residents of slums creatively and innovatively navigate the contours of urban struggles. Guided by the concept of civic imagination, the goal of this article is to challenge both the theoretical and practical representations of slums which tend to focus on what is lacking, while undermining the very generative possibilities arising from everyday social experimentations and contestations. Building upon the contemporary view of slums, this article undertakes the task of theorising slums as a new form of urban practice that is increasingly becoming part of urban identity. The article examines how day-to-day individual and collective experiences inspire creativity and innovations that have become vital to the sustainability of livelihood in modern slums.

Using evidence gathered from my dissertation work in Kibera Slum in Nairobi, Kenya, the goal of this presentation is to emphasise the cardinal importance of urban informality to contemporary thinking and practice in urban studies. It is important to underscore the fundamental roles that the urban poor play to alleviate their conditions, given the state of their depravity. By highlighting civic imagination in Kibera Slum, I am calling for a radical reconsideration of urban informality. I believe that the assemblage of human enterprise within this informality provides unique opportunities to examine new theoretical and practical approaches when investigating the geographies of urban struggles, particularly in slums.

Defining Civic Imagination

Civic imagination is the 'capacity to imagine alternatives to current social, political, or economic conditions' (Jenkins, Sangita, Lian & Neta, 2016: 300). It is the 'ways in which people individually and collectively envision better political, social, and civic environment' (Baiocchi, Bennett, Cordner, Klein & Savell, 2014: 54). It is a collection of human processes, activities, adaptations, and innovations which arise as enactments of alternative ways of living in response to existing social realities. Using Kibera Slum as a case study, this article focuses on underscoring a set of human activities that highlight civic imagination in a place otherwise understood by its social, economic, political, and environmental disillusionments. I will utilise my personal accounts, as well as evidence obtained from various documents and field visits, to portray a set of well-crafted activities and frugal innovations that exemplify civic imagination in Kibera. This portfolio of human experimentations will set the ground for reimagining contemporary slum-hood.

'A Cosmopolitan Ghetto'

About two decades ago, in 1997, I was a third-grade pupil at Christ the King Primary School. The school was situated deep in the heart of Kibera Slum, about thirty minutes' walk from the homeless shelter for children where I resided, also located in Kibera. To get to and from school, the other boys from the shelter and I had to wake up at 5 am and start the trek by 5:30 am to be in school no later than 6:15 am. I dreaded these morning treks for so many reasons! First, it was always dark, which made it very difficult to see where and what we were stepping into. The hikes to and from school involved traversing lowly-built shanties, jumping over cesspools, and climbing over garbage hills. We also had to be vigilant of open sewer systems spread across the trails.

The second reason I dreaded these walks was because of the infamous 'flying toilets'. There were very few public and private toilets in Kibera. To compensate for this, people used plastic or polythene bags to relieve themselves before throwing them away into the streets or onto the roofs of nearby shanties. They were dubbed 'flying toilets' because, at any given moment, a plastic bag filled with faecal waste could come flying through the air like a meteorite on a clear blue night sky. We had to be cautious walking to school in the wee hours of the morning, lest we stepped on one of them or,

even worse, one came flying and landed on our heads.

The third reason these morning walks horrified me was for security reasons. It was all too common that, on our way to school, we might encounter a mutilated dead body dumped along the narrow dirt trails meandering through the shanties. I recall many times we had to jump over mutilated bodies stretched across the trails with our eyes closed because we were too frightened to look at them. Most of these corpses were the victims of violent robberies or what we called 'mob justice' – a form of public retaliation towards petty thieves. As a result, we were terrified of travelling in the dark anywhere in the slum and always travelled in groups. The fourth reason I despised the long treks to school was the situation we faced on rainy days. The rain turned the dirt roads into a long stretch of thick stinking nasty sludge. It was a nightmare plodding in this mess to school!

In early 2001, I graduated from Christ the King Primary School, one of the few schools that served Kibera. After my graduation, I was accepted to an all-boys seminary for my high school education. I packed the few belongings I had and left the homeless shelter and Kibera with no intention of returning. Forward 15 years later. In 2015, after spending 10 years in the United States pursuing higher education, I finally returned to Kenya to visit my family. One of my priorities, after reuniting with my family, was to visit Kibera again – partly to see how the place had changed, and partly to explore the state of the 'flying toilets'. I was starting my first year of a doctoral degree at the University of Delaware at the time and was struggling to put my thoughts together on what I wanted to do. While my orientation was towards exploring issues related to urban poverty and collective creativity, I had no sense of direction. So, my visit to Kibera was also to search for ideas worthy of dissertation research.

A few days after my arrival in Kenya, I found myself tucked in between five passengers on the squeaking back seat of a matatu (minibus) headed to Kibera. The bleak memories of my early life there were still fresh in my mind. I had an image of Kibera in which I was expecting to see a protracted line of 'flying toilets' spreading across and along the dirt trails. In preparation for such an occurrence, I was dressed in heavy tall boots. I was not carrying anything of value because I was afraid that I would get mugged, just like in the old days.

However, when I got to Kibera, instead of a prolonged line of 'flying toilets' along the dirt roads traversing the corroded shanties, I discovered dozens of public and community-sponsored toilets and bathrooms spread across the slum. I found dozens of community-operated multifunctional bio-centres. These are sanitary blocks that use bio-digester systems to treat waste to produce biogas that the community then uses for various purposes. The community had found innovative ways of transforming human waste into gas for energy and fertiliser for various purposes, and liquid waste into treated clean water. These bio-centres also served multiple purposes beyond treating human waste. They created opportunities for economic stability through employment, environmental sustainability through waste management and clearance, and social and political stability by providing venues for various social activities that brought the community together.

In places where I was expecting to be robbed or attacked, I found an established network of digital policing. People had found a way to use the widely available and accessible mobile phone technology to create an online platform of information detailing the security of various locations in Kibera. The community constantly updated this system, thus providing accurate security information to the public. The system also served as a vital virtual information board where residents could post ongoing events and activities which united the community together through similar interests.

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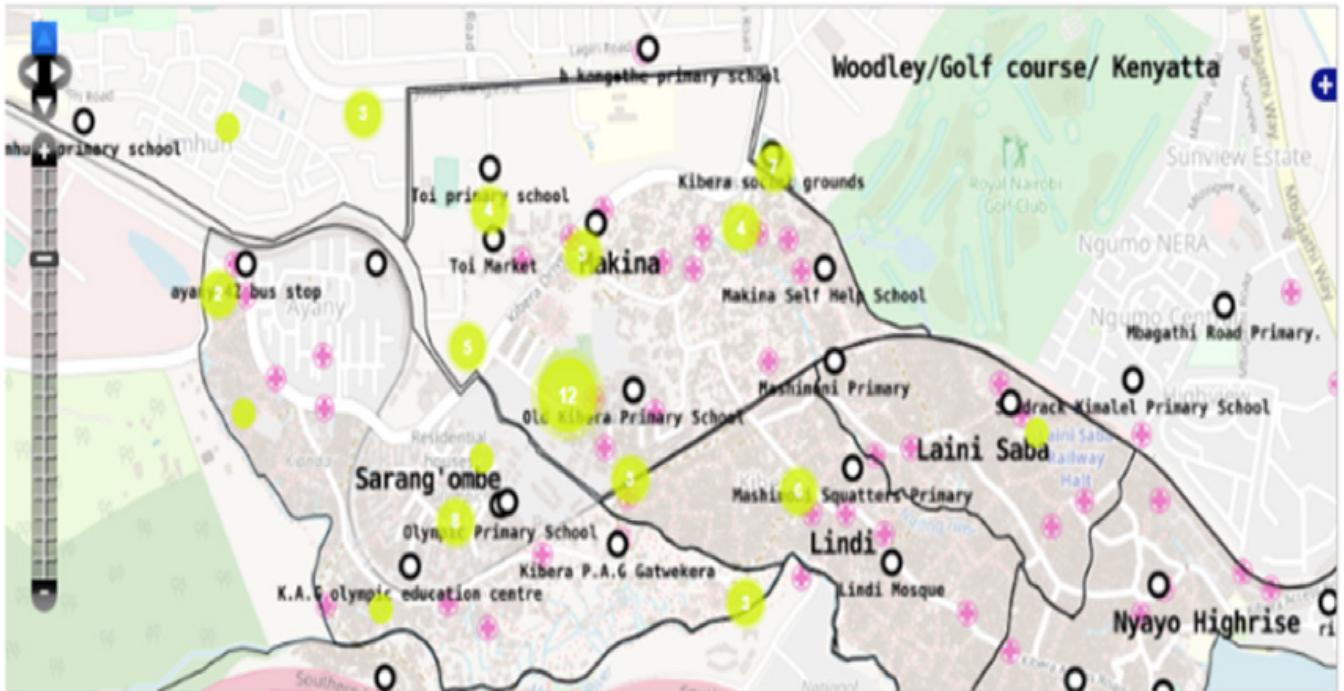
Figure 2: Circles show the number, date, and types of sports events in Kibera and their specific locations (Kibera News Network)

To address the issues of water hygiene and water deserts, people had found innovative ways of providing clean and accessible water to residents. There was an extensive system of water ATMs supplying clean water to residents at a low cost. These ATMs utilise smart cards where users buy and add points into their cards, then use the points to dispense clean water from an ATM vending machine. The slum had also adopted an extensive aerial water system which comprises of above-the-ground water pipes and tanks hovering across Kibera. These ensure that the community can access clean water, therefore addressing most of the health issues that were common two decades ago when I was a resident there.

I also discovered the existence of an extensive community mapping system. For a long time, Kibera as a community was not recognised in official government maps. This meant that when the government was planning and distributing public goods and services, Kibera was left out of these benefits. As some of the individuals I interviewed noted, Kibera

was considered a blank space in official government maps which only became important during political seasons due to its rich repertoire of young energetic voters. However, in late 2009, a group of youths from Kibera, realising that their community was considered a blank spot on official maps, undertook the task of mapping their community. Utilising freely accessible technology such as the OpenStreet Mapping System, they created MapKibera.org – the first free and open digital map of their community. Using feedback from residents, the group aggregated various resources available in Kibera into one open free interactive system that locals could access. This system has now become a vital information and awareness mobilisation tool for the inhabitants of Kibera and surrounding slums in Nairobi, Kenya.

Image 1: Water ATM Vending Machine in Mathare Slum (left) (UNFCC/Chris McMorrow); Aerial water system in Kibera (top right) (Daniel Wesangula); Water ATM in Mathare Slum (bottom right) (Grundofs)

Additionally, residents have also created a plethora of social organisations that focus on mobilising information. Organisations such as Habari Kibera, Voice of Kibera, Kibera News Network, Humans of Kibera, Pamoja FM and MapKibera, among others, focus on mobilising awareness of local issues that impact the community's social, economic, political and environmental development. The two images below are examples of the efforts of the community to mobilise information. The first image shows the distribution of schools in Kibera based on their location, type, and sponsorship. The second image shows the impact of recent demolitions of schools in Kibera. It highlights which schools were relocated and where they were relocated to as a result of these demolitions. The information in these images is gathered and aggregated by the community itself to document and share available resources, as well as to indicate how the community is changing.

Figure 3: Schools Map (MapKibera.org)

School Type	Number of Schools
Pre-Primary School	144
Primary School	147
Secondary School	31
Vocational School	13

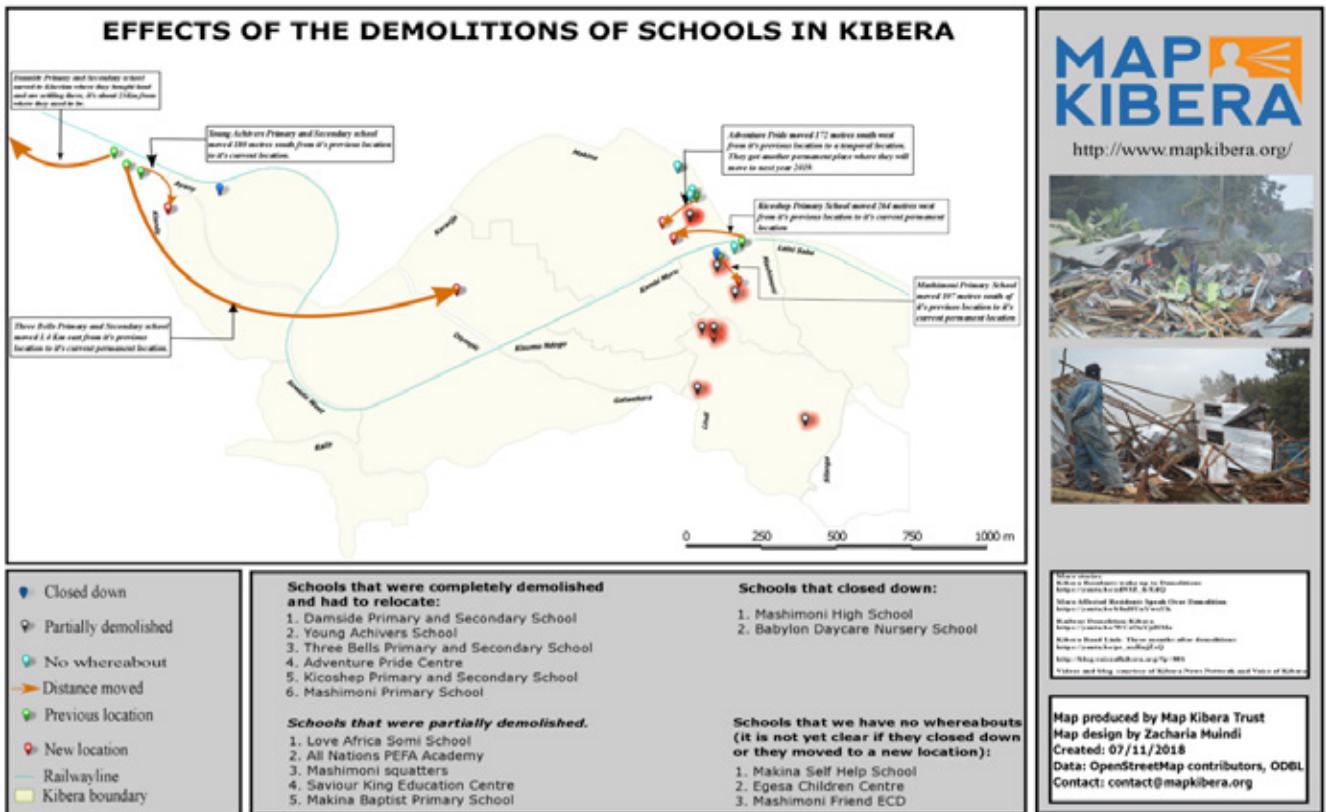| Primary Operators/Sponsors	%
NGO/CBO	37%
Private	29%
Religious	27%
Government	4%

Figure 4: Impact of Recent Demolitions in Kibera (www.mapkibera.org/blog/)

My return to Kibera was filled with anticipations of the bleak images of struggle and despair that I had witnessed as a child growing up in this slum. Even though I had done some research before travelling back, just to see how the slum I used to know had transformed within a period of two decades, much of the information I had gathered had portrayed Kibera as a labyrinth of social, economic, political, and environmental decay. Therefore, I was not expecting much more than what the YouTube videos, tourist blogs, and newspaper reports I had encountered had painted into my mind: eye-searing misery. Instead, what I found became a source of remarkable inspiration to me. The creative social enterprise emerging and thriving in such a vulnerable environment aroused my curiosity to want to learn more about what has inspired such unique social experimentations and what implications these have to development theory and practice. This became part of the aim of my dissertation: to unearth the untold truth about human resilience in the most broken of places.

The examples of innovative adaptations highlighted above exemplify what this article terms as civic imagination, a set of creative alternatives that individuals or groups employ to address common threats in the face of precarity. A review of existing documents cataloguing these innovations in Kibera revealed that local grassroots organisations have been at the core of these innovative adaptations and experimentations. For example, an analysis of aggregate data from OpenschoolsKenya.org detailed that there are currently over 364 formal and informal schools in Kibera providing primary, secondary, and vocational education. Compared to early 2000 when I was last in Kibera, this number of academic institutions had more than quadrupled in a period of fewer than two decades.

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Sponsors	Numbers of Schools	Number of Students	Number of Teachers
Religious Institutions	96	12065	579
Community-Based Organisations	99	15374	664
NGOs	17	1685	95
Government	13	14260	328
International NGOs	3	732	22
NGO/CBO	3	762	38
Private	92	8200	394
Unknown	8	9	167

Further analysis of this data exposed even more surprising news. Of the 364 schools in Kibera, 99 of them are sponsored and operated by local community-based organisations (CBOs), 96 of them are run by local religious institutions, and 92 are privately operated. The table below dissects this analysis. What is even more interesting is the level of government involvement in the provision of education in Kibera. Of the 364 schools, only 13 of them are government-sponsored and about 3 are operated by international NGOs, according to reviewed data.

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A review of another dataset from MapKibera. org revealed that there are at least 216 healthcare institutions spread across Kibera. These institutions include hospitals, pharmacies, and dispensaries. They are operated by local organisations and founded by residents. In early 2000, the number of healthcare facilities in Kibera was less than half this number.

This combined set of data underscores one major point that Suttles (1968) makes: when viewed from the outside, residents of slums appear disorganised and in dire need of aid. However, when seen from the inside, they are intricately organised according to their own standards and are fairly insistent on finding inventive ways to create alternatives to the realities presented by their unforgiving environment. The organisation of Kibera residents in this study, for example, was better articulated in the manner in which people have coalesced their strength to address common threats. While there is consensus among scholars of social movements that social organisations are vital instruments in ensuring and enhancing the stability and sustainability of a community (Coleman, 1990; Fox, 1996; Putnam, 2000), this study also revealed that social movements are an expressive articulation of individual and collective ingenuity, particularly in places of marginalisation. Such movements highlight how individual/s creatively envision, conceive, and model solutions to their common threats by forming collectivities. For example, between 2000 and 2010, the total number of grassroots organisations in Kibera more than doubled from 31% to 69%. Other studies reveal that there are over 100 grassroots organisations working in Kibera (Ochieng' & Matheka, 2009). Most of these groups are hybrid organisations pioneered by

residents to address common threats by providing diversified services and resources.

An analysis of the mission statements of these organisations, using basic word-cloud software, exposed at least five major areas of service concentration. These areas include: health and wellness, sanitation and water, social and economic development, environmental preservation, and information mobilisation. Interestingly, the data did not corroborate the mainstream assumption that housing is the biggest problem facing residents of slums. Even when I asked interviewees to identify some of the most exigent issues facing their community, housing was not high on the list of challenges mentioned. This observation was particularly important because it highlighted a common policy fallacy that housing is the primary problem in urban slums and that the solution to the challenges faced by slum dwellers is therefore to relocate them to better residential areas. As the image below illustrates, some of the most common phrases in this analysis fall under health and wellness, environment, mobilisation, sanitation, information, and economy. Notice that housing was not one of the phrases!

To mainstream society, the housing conditions of slums present an image contrary to what is considered as stable and reliable. In the case of Kibera, however, the data analysed revealed that while housing was a concern, it was not on the top of the list. This finding was corroborated by my interviews with Kibera residents. For example, the photo below shows the home of a resident I visited during my field study. As I was observing the single-room mud shack that the respondent shared with her husband, daughter, and granddaughter, all I saw was dire desperation. There was only one bed for four people, which also served as a place to store clothes. Many of the family's belongings were hanging on the wall to create room for movement. As an outsider, my assumption was that the respondent needed a bigger house and I expected her to acknowledge this as she was discussing some of her challenges. However, after forty minutes of conversation, housing was not mentioned as part of her problems. She had a myriad of other challenges, ranging from health to economic issues, but not housing.

Strength from Broken Places

It is customary to assume that places like Kibera are breeding environments for social, economic, political, and environmental vices. While there is undeniable evidence of the human struggle for survival, there is also overwhelming proof of alternative adaptations that have surfaced out of human ingenuity and creativity. A closer look at the day-to-day life of Kibera residents reveals a society that is in a constant reconstruction for betterment, as the images below – taken during my field study – pinpoint. In contrast to the image of the slum as the epitome of urban decay, these images highlight the slum as a symbol of urban social reconstruction, where the urban marginalised progressively re-innovate themselves from their subtle creativity.

Image 2: A Kibera resident's home during my field visit (Edwin, O., 2018)

Image 3: Daily Hustles in Kibera (Wambui, J., 2018)

It is easy to dismiss this creative reconstruction when we look at a place like Kibera from afar through the neoliberal telescopes. However, when we zoom in and look at life through the kaleidoscope of those living it, we are 'made all the more aware of how our own ideals have blinded us to the practicality of the slum residents' (Suttles, 1968: 12). We are also made more aware of the captivating beauty and aspirations often concealed from the mainstream narrative of slums, which instead focuses on the contents of their discontents.

Re-Imagining Slums

In the last few decades, scholars of urban studies have been struggling with how to break away from the old paradigms and regulations that have dominated both the theoretical and practical understanding of urbanisation. The reigning neoliberal theories on the urbanisation process have traditionally operated on the idea that cities everywhere follow a similar basic standardised template of development (Murray, 2017). This belief has resulted in global replications of urban development policies and theories that are rooted in the generic caricatured portrait of cities as glittering centres of social, economic, political, and environmental stability and sustainability. This utopian image of cities has dominated the public imagination for the last century, but in recent decades it has come into sharp contrast with the hardened realities that are now defining contemporary metropolitan experiences and lifestyles. This is particularly true in the expanding megalopolises of the Global South that have been subjected to the twin pressures of uncontrolled population burst and an unprecedented rate of urban inequality.

While the traditional image of the city has often offered a comforting assurance of social, economic and political success, as well as convenience and privilege, the increasing rate of urban marginalisation is now unsettling this promise. This is particularly true in the cities of developing nations where more than half of the urban population resides in slums (Mo Ibrahim Foundation, 2015). Initially seen as a 'transitory phenomenon expected to fade away with economic growth and modernization, slums have not only failed to disappear, but they have grown in size, and density in land occupation, becoming the rule, rather than the exception, for the city growth' (Smolka & Larangeira, 2008). A dense body of urban scholarship demonstrates that as urbanisation increases in low- and middle-income countries, so too does urban inequality and the growth of slums (United Nations, 2016). It is becoming increasingly clear that slums are now part and parcel of the urban development process. In 2003, UN-Habitat called for cities in the Global South to start embracing them as the new forms of human settlements (UN-Habitat, 2003). In this call, the UN-Habitat argued that while slums continued to present many challenges, it was becoming clear that their growth and persistence were inevitable. It was, therefore, necessary not only to re-conceptualise them, but also to find ways of integrating them into the overall urban development framework.

Image 4: The Superheroes of Kibera is an initiative that helps children in Kibera reimagine themselves as local superheroes using simple recycled materials. Images courtesy of Superheroes of Kibera at https://www.facebook.com/groups/superheroesofkibera/

Integrating slums into the urban development framework requires that urban scholars adopt a new language, one that is different from the traditional view of slums as petri dishes of human misery that need to be eliminated at whatever cost. The work that this extract from my dissertation research has presented is part of an ongoing search for this new language. It is a continuation of the existing body of contemporary scholarship that views slums as places where residents use frugal innovations to navigate the harsh realities presented by their environment (Jacobs, 1992; Neuwirth, 2006; Gilbert, 2007; Holston and Caldeira, 2008; Roy, 2011; Dovey, 2012; Kayizzi-Mugerwa, Shimeles & Yameogo, 2014). Using practical evidence from Kibera, one of the largest slums in the world, I have unpacked and exposed dynamic and creative innovations and transactions that are at the core of the livelihoods of the slum's residents. The ultimate purpose was to further debunk the traditional neoliberal understanding of slums by providing practical evidence of the creative reconstruction that is taking place there. The article has focused on highlighting various ways in which the DIY (do-it-yourself) innovations in Kibera are compensating for the lack of formal service delivery institutions. The set of frugal experimentations captured in this work offer a strong rebuke to the neoliberal conceptualisation of slums as places of 'metropolitan decay'. Contrary to this view, the evidence I present supports the argument that slums are places of metropolitan innovations.

Indeed, Jane Jacobs argues that the inherent resources necessary for 'unslumming' the slum exist within the slum itself (1992). According to Jacobs, 'unslumming' does not mean the demolition or

> 66 'unslumming' does not mean the demolition or relocation of slums, as seen with current upgrading mega-projects. Rather, it means improving slums using the resources embedded within them. Successful 'unslumming' hinges on the quality and quantity of the existing regenerative forces often inherent in the social infrastructure 99

relocation of slums, as seen with current upgrading mega-projects. Rather, it means improving slums using the resources embedded within them. Successful 'unslumming' hinges on the quality and quantity of the existing regenerative forces often inherent in the social infrastructure (Boo, 2012; Gilbert, 2007; Jacobs, 1992; Neuwirth, 2006; Roy, 2011). This requires an understanding of the structural and relational arrangements of the existing social infrastructure. Attention to its capacity to absorb the present and emerging social, economic, political, and environmental shocks is important. Given the limited scholarly work attempting to analyse the transforming nature of the social infrastructure of slums in the last decade, this work provides a crucial entry point to the new discourse of slums that pays attention to the regenerative forces that emerge out of social desperation for survival. This article provides strong evidence to support the emerging theoretical narrative that the creativity, resilience, ingenuity, and social capacity in slums are potential tools for 'unslumming' the slums (Bayat, 2007; Coleman, 1990; Field, 2003; Holston & Caldeira, 2008; Jacobs, 1992; Putnam, 2000; Whyte, 1943).

Conclusion

This article has focused on providing a twin story of contemporary cities, especially those in emerging economies. First, the article has highlighted the increasing promise that cities in developing nations offer as centres of social and economic development. Second, the extract has illustrated the competing narrative of the city highlighted by the growth of slums, which demonstrates the existence of increasing inequalities. Slums illustrate the uneven development of cities and the unequal distribution of their benefits. It is undeniable that the development of slums parallel to the growth of cities poses considerable concerns to the question of urban sustainability, especially in areas that lack the means and resources to address the undesirable outcomes of slums. By nature, slums do not highlight the best of society. They underscore a caricature of arrested development that often impacts those with little means to compete with and in the rapidly growing metropolises. However, as studies have demonstrated, slums are here to stay as an integral part of the new urban identity. In fact, in emerging

economies, especially in Sub-Saharan Africa, slums represent the new urban frontiers. It is therefore imperative, in both theory and practice, to start embracing them as the new forms of metropolitan identities.

While the call to embrace slums as the new urban frontiers can be seen as an overreach or a deviation from the traditional theories and practices that have governed urban development discourses, it is undeniable that unless we embrace them as so, any attempts to address their challenges and threats will continue to be futile. This article has made a case for adopting slums as the new forms of urban identities and frontiers by underscoring creative DIY innovations that are transforming the lives of slum residents for the better, as evidenced in Kibera. These DIY innovations offer new ways of looking at slums and their residents as what Dr. Anil Gupta calls 'hidden hotbeds of inventions' (TED, 2009), or what one resident of Kibera termed a 'cosmopolitan ghetto', where frugal innovations emerge out of collective ingenuity and a desire to create change with little means. To address the problem of slums, and thus the question of urban sustainability in emerging economies, we must look into and work with the resources already embedded in slums themselves. This article provides just an entry point to both the theoretical and practical reconsideration of slums as places of metropolitan innovation, rather than just of metropolitan decay.

I would like to conclude this article by highlighting some lyrics from a song written and produced by a group of artists from Kibera Slum. Using a hybrid genre that mixes Western hip hop and rap with a local Swahili rhythm, the artists not only recognise the challenges that face the residents of slums, but also acknowledge the many ways in which residents unite to create frugal yet effective innovations to address their collective needs. The song sends a message that despite the chaotic nature of slums, there is nonetheless hope and resourcefulness that breeds progress and transformation. More importantly, there are people whose identity is not defined merely by the state of their existence, but more deeply by their character, collectivity, and vision for a better community:

'They say that nothing good never come outta a slum,
But look what we bring out the slum for you to learn,
Artwork and handwork is the talent that we have,
The abilities we have, we strictly preserve,
Why they despise and criticize,
But once you're in the place,
Men and women so nice,
And the children so wise,
Despite the challenges they may face,
Happiness is on their face,
One love is what they embrace.
I call it home they call it a slum,
My motherland I love it most,
Kibera, Kibera...' (Made in Kibera, 2016)

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