

ARTICLE

# A share in the sands: trips, pits and potholes in Accra, Ghana

Katherine Dawson

University College London, London, UK  
Email: [katherine.dawson@ucl.ac.uk](mailto:katherine.dawson@ucl.ac.uk)

## Abstract

This article deploys sand as a potential way of engaging with contemporary livelihoods in the Ghanaian city of Accra – one of many metropolitan nodes in an urbanizing region of West Africa. Both as a very real material at the heart of concrete urbanization and as metaphorically indicative of the shifting landscapes of opportunity and income on which lives and livelihoods are marked out, sand is offered as a way of seeing and writing about the city. The article brings these two facets of urban sand together in more concrete ways, considering how the material production of the city becomes the uneven, uncertain ground of urban life-making. Drawing from fourteen months of ethnographic fieldwork in Accra, the article engages with the movements of sand across the city, as it travels from extraction zones (or pits) to lorries and then to places of consumption. By honing in on the material behaviours and temporal junctures of sand as it shifts its shape, form and directions, the article draws out the ways in which sand emerges as a platform for exchange, negotiation and ultimately income for different people across the city region. In turn, it offers a *share in the sands* as a tentative holding space for the kinds of claims made on and through sand, positioning them as indicative of a dweller-led, emergent politics that claims a share of an income, livelihood and urban future.

## Résumé

Cet article déploie le sable comme un moyen potentiel d'aborder les moyens de subsistance contemporains dans la ville ghanéenne d'Accra, l'un des nombreux pôles métropolitains dans une région d'Afrique de l'Ouest en voie d'urbanisation. À la fois comme matériau très réel au cœur d'une urbanisation de béton et comme révélateur métaphoriquement des paysages changeants d'opportunité et de revenu sur lesquels se dessinent les existences et les moyens de subsistance, le sable est proposé comme un moyen de voir et d'écrire la ville. L'article rassemble ces deux facettes du sable urbain de manière plus concrète, en considérant comment la production matérielle de la ville devient le terrain inégal et incertain de vie urbaine. S'appuyant sur quatorze mois de travaux ethnographiques menés sur le terrain à Accra, l'article traite des mouvements de sable à travers la ville, depuis les zones d'extraction (ou sablières) jusqu'aux camions, puis jusqu'aux lieux de consommation. En se focalisant sur les comportements matériels et sur les tournants temporels du sable alors qu'il change de forme et de direction, l'article fait ressortir les manières dont le sable émerge comme une plateforme d'échange, de négociation et en

définitive de revenu pour différentes personnes de cette région urbaine. Enfin, il se propose comme une tentative d'espace d'ouverture pour les types de revendications faites sur le sable et à travers lui, en les positionnant comme un révélateur de politique émergente menée par les citadins qui revendique une part de futur de revenu et de moyens de subsistance, et de futur urbain.

## Resumo

Este artigo utiliza a areia como uma forma potencial de envolvimento com os meios de subsistência contemporâneos na cidade ganesa de Accra - um dos muitos nós metropolitanos numa região urbanizadora da África Ocidental. Tanto como um material muito real no coração da urbanização de betão como, metaforicamente indicativo das paisagens mutáveis de oportunidades e rendimentos sobre os quais as vidas e meios de subsistência são marcados, a areia é apresentada como uma forma de ver e escrever sobre a cidade. O artigo reúne estas duas facetas da areia urbana de formas mais concretas, considerando como a produção material da cidade se torna o terreno irregular e incerto da produção da vida urbana. Baseado em catorze meses de trabalho de campo etnográfico em Accra, este artigo analisa os movimentos de areia através da cidade, à medida que esta se desloca das zonas de extracção (ou fossos) para camiões e depois para locais de consumo. Destacando os comportamentos materiais e as conjunções temporais da areia à medida que esta muda de contorno, forma e direcção, o artigo examina as formas como a areia emerge como uma plataforma de troca, negociação e, em última análise, rendimento para diferentes pessoas em toda a região da cidade. Por sua vez, este oferece *uma parte nas areias* como um espaço de detenção provisório para os tipos de reivindicações feitas sobre e através da areia, posicionando-as como indicativo de uma política emergente, liderada por um habitante que reivindica uma parte de um rendimento, subsistência e futuro urbano.

## A city built on sand

Sand is a material deployed with the intention of solidifying urban form. Indeed, mixed with water and cement, sand becomes the concrete backbone of cities across the planet, and it is doing this at an accelerating rate – a process of ‘cementification’, in the words of Choplin (2020). For homes, roads, skyscrapers, shopping centres and so on, sand is enlisted on a huge scale, as residents, investors and states attempt to produce a materially stable city in which they can live and through which they might profit and govern. A hard city. Situating sand as central to urban materiality is an argument that I and others have made elsewhere (Dawson 2021a; Mendelsohn 2018; Zalasiewicz *et al.* 2017; Jamieson 2021) and that chimes with the growing public interest in sand as an environmental issue of global significance (UNEP 2019).

Yet, thinking through the city as a sandy landscape also evokes the kinds of evolving movements, choreographies and engagements that majorities perform in the ‘urban now’ (De Boeck and Baloji 2016). Simone’s (2004) ‘people as infrastructure’ drew attention to such relations, recalling the rumours, calculations and forms of knowledge that structure life and living in cities from ‘Jakarta to Dakar’ (Simone 2009). More broadly, a literature on African urbanism has played an important role in this space, moving the focus from a view of some cities as failing sets of infrastructure to a view that sees cities made in spite of, through and beyond such scaffolding (Pieterse 2008; Pieterse and Simone 2013; Diouf and Fredericks 2014; Ernstson *et al.*



Figure 1. Concrete blocks, made up of sand, water and cement, in plots of land, Greater Accra region.

2014; Myers 2011; 2016; Quayson 2014). Such concepts and ways of thinking appeal to notions of shifting urban landscapes that, when not romanticized, depict the deep struggles that urban majorities face to secure homes, livelihoods and futures in many of the world's cities (Simone and Pieterse 2017). In this rendition, the city is a landscape in constant formation: a fluid platform, remaking itself over time and space. In tension with the hard concrete city of sand, the urban landscape might also be understood as a set of *shifting sands* - the uncertain ground on which lives and livelihoods must be marked out.

In this article, I bring these two facets of urban sand together, to consider the ways in which the material production of the city becomes the uncertain ground of life and livelihood-making. More concretely, the article engages with the material spheres of sand in Accra, Ghana, where, like elsewhere, sand is unearthed from the city's outer edges and surrounding regions to support the expanding conglomeration of the Greater Accra region (Figure 1). Situated in the space between a hard city and a fluid city, sand becomes the material entry point into the ways in which urban livelihoods in particular are elaborated. Drawing from fourteen months of ethnographic research in Accra in 2017 and 2021, I engage with the material movements of sand across the city, as it travels from extraction zones (or pits) to lorries and then to places of consumption. The article reveals the diverse labours, livelihoods and income-seeking practices that coalesce around sand's material economies and their multiple temporalities (Kothari and Arnall 2020) - aligning with a literature that recognizes the complex and differentiated livelihood implications of sand's extraction and consumption (Anokye *et al.* 2022; Marschke and Rousseau 2022; Marschke *et al.* 2021; Lamb and Fung 2022; Lamb *et al.* 2019).

By honing in on the material behaviours and temporal junctures of sand as it shifts its shape, form and direction, the article draws out the ways in which sand emerges as a platform for exchange, negotiation, different forms of labour, diverse livelihoods – and ultimately income. In this sense, sand is revealed to be as much a social infrastructure as a concrete infrastructure in the city. Critically, set in the context of ‘wageless life’ (Denning 2010), precarious urban incomes and unequal revenues flowing from sand to various communities and individuals, I recall events that expose a politics of claim-making to the values embedded in sand. In this vein, I offer *a share in the sands* as a tentative holding space for the kinds of claims made on and through sand, positioning them as indicative of a dweller-led, emergent politics that claims a share to an income, livelihood and urban future.

The article is structured as follows. I first introduce a literature that deals with the future of (urban) work globally, in sub-Saharan Africa, and specifically in Accra. This offers an important context for thinking through the significance of labour, livelihoods and claims to an urban income that become apparent as the analysis progresses. I then situate sand in Accra and outline my research methods. From here, I turn to an analysis of the ethnographic narratives and encounters that emerged in the research, examining the various ways in which the material economies of sand coalesce as a platform for value extraction and income demands.

### **Beyond the ‘proper job’**

In the introduction to *Critique of Black Reason*, Mbembe sketches out grand moments in a ‘biography of the vertiginous assemblage that is Blackness and race’ (2017: 2). In this analysis, Mbembe extends the condition of Blackness, arguing that, ‘for the first time in human history, the term “Black” has been generalized’ – indeed, ‘institutionalized as a new form of existence and expanded to the entire planet’ (*ibid.*: 5). Painting a picture of a present marked by the triumph of finance capital, digital technologies and a ‘postimperial military complex’, Mbembe writes: ‘If yesterday’s drama of the subject was exploitation by capital, the tragedy of the multitude today is that they are unable to be exploited at all. They are abandoned subjects, relegated to the role of a “superfluous humanity”’ (*ibid.*: 3).

This reading captures a broader sentiment expressed across academic disciplines, within governments and among policymakers, marked by an anxiety of the prospect of the ‘wageless life’ (Denning 2010). Such anxiety prompted the International Labour Organization (ILO) to assign to the newly formed Commission on the Future of Work the task of producing a series of independent reports on ‘how to achieve a future of work that provides decent and sustainable work opportunities for all’ (ILO 2016). In a landmark report, the ILO (*ibid.*) sets out a future of work in the context of the expanding economies of digitization, automation and low-carbon transitions. According to Ferguson and Li, in order to engage with this contemporary conjuncture, questions must be asked that depart from a fixation ‘on the old story-line of ever-expanding wage employment’ (2018: 4). They pose a series of questions related to distributive claims, gender, generation, identity and land that together ‘offer points of entry for understanding lives and livelihoods, membership and meaning minus the telos (though not spectre) of the “proper job”’ (*ibid.*: 5). In attempting to denaturalize the idea of a ‘proper job’ while simultaneously re-politicizing forms of labour that

sustain vast numbers of people around the world, Ferguson and Li conclude that making sense of what lies beyond the ‘proper job’ demands ‘a focus on the empirical contours of the present – what is there, and what is emergent’ (*ibid.*: 20).

In Ghana, economic growth at a national level has been significant. Ghana was enshrined as the ‘the world’s fastest growing economy’ by the International Monetary Fund (IMF) in 2019 (Edmond 2019). Yet, as United Nations Special Rapporteur on Extreme Poverty and Human Rights Philip Alston commented: ‘[I]nequality is higher than it has ever been in Ghana, while almost one-quarter of the population lives in poverty, and one person in every twelve lives in extreme poverty. As a result, a large number of Ghanaians do not enjoy their basic economic and social human rights’ (Yirenkyi 2020).

Significantly, in 2018, the Ibrahim Index of African Governance concluded that ‘even though the patterns of growth and job-creation in Africa are complex and change from region to region, “the continental trend is one of resilient but jobless growth”’ (Mo Ibrahim Foundation 2018: 52). In December 2018, the IMF published a report that shared a projected analysis of the future of work on the continent in the face of dramatic uncertainties surrounding technological innovation, climate change and global economic integration. The IMF concluded that an average of 20 million jobs per year across the continent will be required to keep pace with forecast increases in population growth and given projected expansions of urban populations; this requirement will likely be marked by the need for ‘urban jobs’ (Abdychev *et al.* 2018: 1). For Ferguson (2015), this ‘jobless growth’ has given rise to urban economies characterized by stark struggle and forced flexibility.

With these realities in mind, studies that engage with work, livelihoods and labour in Accra are not difficult to locate. The term ‘informal economy’ in fact arose through insights derived from the neighbourhood of Nima in Accra (Hart 1973). Since then, a proliferation of work has explored the contours of informal work throughout the city. In more recent decades, this has been shaped by the consequences of neoliberal reform from the 1980s onwards, which saw the loss of urban jobs as well as subsidy reductions for housing and basic infrastructural provision (Obeng-Odoom 2012; Grant 2009; Murray and Myers 2006). Where population increases in urban areas ‘have not been matched by opportunities for wage-paid employment, expectant work seekers in the cities and towns have been forced to find other means to generate income’ (Murray and Myers 2006: 120). This rough sketching has formed the basis of diverse empirical engagements with livelihoods in Accra, including, among many others, e-waste economies, the gendering of different forms of entrepreneurship, the economy of free time and struggles over space in the city (Amankwaa 2013; Grant and Oteng-Ababio 2012; Oteng-Ababio 2012; Langevang and Gough 2012; Quayson 2014; Gillespie 2016). In recent years, important work has appeared that examines the impact of the Covid-19 pandemic on informal livelihoods and household poverty in Accra and elsewhere in Ghana (Amoah-Nuamah *et al.* 2020; Adom *et al.* 2020; Asante and Mills 2020). These studies point to the exacerbated struggles facing inhabitants who rely on markets and busy streets to make a living, with residents suffering from reduced sales, forceful relocations, supply shortages and business closures, with observers pointing to an increased number of households entering conditions of poverty (Bukari *et al.* 2021).

The analysis in this article, however, moves away from engagements defined strictly by the ‘informal economy’. Invoking both Kate Meagher and Keith Hart, Ferguson argues that ‘the sorts of economic activities the term was originally intended to capture have become so pervasive as to call into question the very concept of an “informal economy”’ (2015: 11). Indeed, as Hart has argued, ‘when most of the economy is “informal”, the usefulness of the category becomes questionable’ (2006: 27). This is indeed a reality in sub-Saharan Africa, where a significant percentage of workers are in vulnerable employment – or in labour marked by ‘limited access to social protection schemes’ and ‘confronted by low and highly volatile earnings’ (ILO 2016: 3). The material production of the city is perhaps no different; its realization is supported by a host of labours and practices that could be considered informal. However, moving beyond a need to identify the informal and often exploited forms of labour and nature that underpin the production of the concrete city, this article looks more closely at the lives, livelihoods, narratives and encounters that are central to ‘the story of the economy of sand’ in Accra (Lamb *et al.* 2019: 1525). In doing so, and while keeping in view the uneven distribution of incomes that characterize the sand economy, the article reveals the ways in which sand – and its multiple materialities and temporalities – becomes a source of income for a host of different people, in different ways. This, I suggest, is indicative of the ways in which urban incomes and claims to them co-emerge with the making of the material city.

### Situating sand in Accra

The empirical data deployed in this article draws from my doctoral research in Accra, Ghana. Accra sits on the southern coast of Ghana, bordering the Atlantic Ocean. As the headquarters of the Ga people and the former seat of British colonial power, the city possesses a hybrid history of contested rules, governance and identities (Parker 2000). The city region of Greater Accra reached a population of 5.4 million people in 2021,<sup>1</sup> and the boundaries of built-up Accra continue to stretch into surrounding villages and farming areas, where individuals and companies buy up land for residential use (Akubia and Bruns 2019). The extraction of sand often – though not exclusively – takes place in peri-urban Accra and beyond, extending into the rural landscapes of Accra, depending on the availability of and access to land. The extraction of sand – otherwise known as ‘sand winning’ – can be classified as legal or illegal; however, as described to me, the boundary is somewhat blurred. At the legal end of the spectrum, sand contractors were responsible for acquiring the land from various landowners, bringing machinery to the site, extracting the sand and loading it onto tipper trucks, taking a fee from each truck. Contractors were responsible for obtaining licences and permissions from the Minerals Commission and paid a fee to the landowner, depending on the quantity of sand extracted from the particular parcel of land.

<sup>1</sup> ‘Populations by regions, Greater Accra’, Statsghana.gov.gh, 2021 <<https://www.statsghana.gov.gh/regionalpopulation.php?population=MTM0NTk2MjQzOS4yMDE1&&Greater%20Accra&regid=3>>, accessed August 2022.

In many ways, sand conjures up a similar story to other extraction processes. Sand is extracted from pits and revenues flow both to those with the capital and to the owners of the land in which the resource is embedded. Mirroring the sale of land leases across the Greater Accra region, revenues from sand tend to flow to more powerful individuals and families who already own land. I was told that the majority of landowners in peri-urban Accra are Ga who had long occupied strips of land stretching from family quarters in downtown Accra out into the peri-urban and rural landscapes of the wider city region (Parker 2000). Other groups do occupy land in these areas, including Ewe communities, who migrated at various points in history. However, I was told that, in many cases, these non-Ga communities rent the land from indigenous groups and have little power or say over the future of that land. This was discussed during interviews with communities in Greater Accra, with residents complaining that their farmland was being handed over to sand contractors and estate developers, leaving them with limited access to food or income and feeling powerless to resist. Oduro and Adamtey's (2017) research suggests that revenues from the sale of sand are rarely distributed widely into the communities where sand is found, with money largely retained by landowning groups. This was also confirmed in conversations I had with those working in the sand industry.

The pits from which sand is unearthed in Greater Accra and the surrounding area varied depending on the quality and quantity of sand as well as on the amount of land available for extraction. Once the sand has been extracted from the land, contractors move to a new stretch of land and new sources of sand. In this way, the pits were incredibly mobile and demanded that their location be sought on a daily basis. As a researcher, locating these pits was achieved via word of mouth – that is, asking local inhabitants and shop owners where sand was being extracted – as well as by following the flags that were planted in the earth on the roadside to indicate the pits' locations. The afterlives of the land from which sand was extracted varied. In some cases, land had already been sold to estate developers, who would proceed to prepare the ground for residential building. In other cases, if the contractors abided by the regulations, the land would be reclaimed, a process that involved restoring the topsoil on the surface of the land in order to allow previous occupants – often farming communities – to continue farming the land. In various conversations, there were debates about whether it was possible for land to operate at its previous yield; people argued, for instance, that machines compacted the topsoil, which rendered it less fertile.

The bulk of my research took place between 2017 and 2019, and I have since returned to Accra for several shorter visits. The research was multi-sited and involved engaging with various facets of the sand economy and the residents who lived and worked in a small portion of Awoshie Junction in western Accra. I spent many months visiting this community, learning from residents who shared experiences of their precarious occupation of government land, which sat under an electricity transmission wire (Dawson 2021b). On the opposite side of the multi-lane road was a busy sand station, hosting trucks and piles of sand. It was one of many spaces in the city that acted as a depot for fresh sand, gathered from the rural edges of Accra and the surrounding regions and brought here for sale. As my interest in this material grew, and as its centrality to urban life as built form became more apparent to me, I began to talk to those working in this space. In particular, I spoke with Francis, a young



**Figure 2.** Performing the duties of the mate, Greater Accra region.

Ghanaian man from Accra who had been working in the sand industry for around five years. At the time, he was working as a 'mate'; this involved assuming the labour-intensive role of directing sand on and off the sand truck and, crucially, securing it in place to limit sand spills from the truck's bucket (Figure 2). Due to the fact that they moved around in tipper trucks all day, the 'mates' and truck drivers in the sand industry were known as 'tippers'. Francis and the truck's driver, Kojo, kindly allowed me to join them on truck journeys throughout Accra as they collected sand from pits and delivered it to various destinations. I went on many trips that encompassed the outer edges of rural Greater Accra and extended into the neighbouring Central and Eastern regions. Most often, we collected sand from pits near the growing town of Ashalaja in Greater Accra and distributed it between block factories, construction sites and the tipper station, from where it would later be sold. Our conversations ranged from their thoughts on the sand economy, the growing spaces of Greater Accra and the difficulty of securing incomes and building homes to the UK economy and Premier League football. On the truck, I was able to ask more detailed questions about the sand economy, how it functioned and who benefited, as well as observe practices, engagements and encounters as they unfolded on the road.

As the research progressed, I also approached authorized sand contractor companies in the Greater Accra region and the immediate surroundings. With the guidance of an interlocutor, permission was sought to spend time at the pits of one particular contractor, Piam. I followed the pits as they shifted across the region, largely in the vicinity of Ashalaja and Hobor. Mornings, afternoons and evenings were spent at the



pit, capturing the shifting economies of sand throughout the day; by visiting in different months of the year, I was also able to observe changes in the market. Having sought permission from the operating site manager, Mr Osei, I was able to spend time speaking with people working at the pits, either those directly employed by Piam as bulldozer drivers, payloaders, land analysts, researchers or administrators, or those who worked in the pits as food providers or selling clothes or shoes. With the assistance of an interlocutor, who introduced me to people and explained my presence, translating from Ga and Twi to English where appropriate, I was able to speak to many of those working in the pits.

### A trip of sand

Francis lived near a row of shops at the centre of the community where I spent a significant amount of time during my research. He regularly passed this line of shops on his way home from the sand station, which was slowly disappearing to make way for an extension to the headquarters of a large charismatic church. We would often greet one another and, if he had time, he would sit next to me to discuss the day's events. It was almost a year after we first met and as we sat watching the daily burning of local waste, Francis expressed his anxiety about securing work. During the time that I had known Francis, work was precarious. On this particular evening, for reasons I am not entirely sure about, Francis was no longer employed irregularly as a mate on Kojo's truck. He would later make headway in finding another truck, with himself as a spare driver and another friend as the main driver, but this never came to fruition. Like many others, he regularly sought irregular work as a mate. Viewing the remnants of the sand station, Francis gestured to the other side of the road, pointing out a Sinotruk Howo truck<sup>2</sup> laden with fresh sand. He said, 'Some guy bought this truck and two more. US\$85,000. If you buy a truck, you can make money.' I asked how this man could have earned the money to buy three, to which he replied: 'In Africa, you can't ask someone how they get their money.'

Compared with the people who owned trucks, those working on them received much smaller incomes that varied according to their roles. As it was explained to me, there is an owner of the truck, who assigns a caretaker, most commonly the driver. Kojo was the main driver. He would make 800 cedis a month (approximately US\$170 at the time of research), based on the premise that he would make 800 cedis a day in profit, six days a week, all of which would be remitted to the truck owner. 'If you make 600 a day, you get 600 a month. If you bring 200 a day, you make 200 a month.' The driver therefore had to ensure that they made profits of 800 cedis a day in order to receive 800 cedis a month as payment from the owner. There was no guaranteed minimum income, but higher profits would result in increased income. The spare driver was not paid anything by the truck owner, nor was the mate. Kojo paid the spare drivers and mates, but sometimes they weren't paid at all: it depended on how much money was made per day, which in turn depended on the number of 'trips' of sand. A 'trip' referred to the journey to and from the pit to collect sand

---

<sup>2</sup> Howo is a model of truck produced by Sinotruk, whose parent company is the China National Heavy Duty Truck Group Co. Ltd.



**Figure 3.** A truck laden with sand leaves the sandpit, Greater Accra region.

(Figure 3). For the tipper drivers, this meant driving out to the pit, collecting sand and delivering it to a site or the sand station. Talking in terms of ‘trips’ was widespread among tipper drivers, but also in the construction industry more broadly. A customer might request ‘three trips of sand’, meaning three truckloads of sand to be delivered to the site. Plots of land for sale may also include ‘a first trip of sand’ as an added bonus to attract prospective buyers. For the tipper drivers, trips of sand were used as a way to calculate their costs and profits. To explain this, Francis listed the exchanges in a regular trip of sand: ‘The sand is 200, the fuel for one trip is 250, council ticket is 15, police stop is 10. You have to bring 800 a day. Sometimes you go twice and you’re at a loss, so you have to use some of your own money to make it up.’ As Francis explained: ‘You will go for three trips in a day before you make 800.’ This was in a context where the sale of sand stabilized at approximately 800 cedis per trip.

Francis had worked as a mate and his income was irregular. Unlike the main driver, who made a stable income every month, work and wages for mates were volatile. Income depended on the number of trips of sand in a day and the number of sales, as well as the number of mates or spare drivers working on the truck that day. On some days, the mate might make nothing at all. Despite this, even as a mate, shifting sand around the city offered a way to make money in an increasingly saturated urban economy of selling goods and performing services. However, demand for jobs on trucks was extremely high and it was difficult to affiliate oneself to a truck. Francis explained that work could be hard to come by, so acting faithfully towards your manager was crucial. Within this context, I would later ask Francis who was responsible for inscribing the front panel of the truck with the Twi words *Di Nokore* – ‘Be Truthful’ – to which he replied that Kojo had pasted the phrase on

the truck to let the owner know that he was faithful, reliable and could be trusted: it was a matter of retaining employment.

Even when work was secured on a truck, it was difficult and laborious. On an early trip, Francis and his colleague Kwaku noted that they had been awake since 2 a.m. and were now on what would be their fifth trip of sand: 'If you have a baby, they will not know you; if you have a girlfriend, they will not see you.' When we discussed in greater detail the cost of a tipper truck (US\$85,000), I asked who had this kind of money. Francis replied that plenty of people in Ghana are financially capable of investing, usually politicians and businesspeople. He said that the owner of this truck had a managerial position in a bank and owned as many as eleven trucks. The truck owners could thus be considered the most significant beneficiaries of the sand economy. Their incomes were stable, guaranteed and ongoing. While, for the tippers, daily costs were subject to change (fuel, food, police stops), the money handed over to the truck owner was consistent, meaning that any increases in short-term costs were absorbed by the tippers. And while landowners also received significant sums of money, their land was finite and thus their ability to cash in from sand was somewhat limited by the boundaries of their plot and by their ability to obtain uncontested access to it. In comparison, truck owners could benefit from the repeated extraction of sand from whatever land the tippers travelled to, cashing in on the shifting geography of the sand economy. As I thought more about this huge sum of money required to purchase a truck, I also considered the need to import it; through some light-touch research, it became apparent that this was even more expensive due to import duties and the possibility of other unforeseen and unpredictable costs at the border. Buying a truck was beyond the reach of most.

The shifting of sands was thus structured by a distinct hierarchy of truck owners, managers, drivers and mates. While it presented job opportunities for some, the proceeds flowing from this work were unevenly distributed. Those with access to capital could acquire trucks and make significant money, while mates, whose access to trucks remained insecure, experienced ongoing income volatility and periodic unemployment. The laborious, yet meagrely paid, work of shifting sands often prompted a critique of both the sand economy and the social structure of Ghanaian society more broadly. Complaining about the level of inequality in the country, Francis said that he felt cheated by the broader social system in Ghana; his peers agreed. Thus, as Francis situated himself in the economy of shifting sands, he positioned himself in the city and the nation more broadly, generating a space in which he could critique the structure of Ghanaian society. In many ways, Francis's and Kwaku's descriptions of working on tipper trucks expressed a broader sentiment that securing a livelihood in Accra was tough and uneven and that the work secured was often laborious. Yet the tippers were only one element in a more expansive sand economy. Indeed, the labours of sand were far wider, encapsulating a variety of spaces and individuals. Together, these broader labours reflect the ways in which sand was materialized as a platform for value extraction, speaking not only to the challenges of improvising incomes in Greater Accra, but also hinting at an emergent set of claims to the values embedded in sand. It is these labours to which I now turn.



Figure 4. Preparing food for sale at the sandpit, Greater Accra region.

### Labours of sand

As I moved through the city with the tipper drivers, it was clear that their labours were integral to the material construction of the city. Through their bringing of sand from pit to city, in many senses, they were city makers. Labours at the sandpit were also paramount in the production of the city. Operating machinery, performing administrative roles, driving motorbikes and loading sand were indeed significant elements in the sand economy. Of equal importance were the economies of consumption that shifted with the sands – the reproductive labour that kept the sandpits moving. This labour was performed almost exclusively by women, who prepared food and sold items of clothing, shifting with the sandpits as they moved across the region. Notable exceptions to this largely female economy included an elderly gentleman selling medicine for truck drivers' aches and pains as well as one or two men who frequently sold work boots and strong-soled sandals at the pits.

During the time I spent with Piam, some of these women would become familiar. Many followed the company from pit to pit, preparing food such as eggs and bread in the morning and rice and stew in the afternoon. Other women would move between sandpits during the course of the day, trying to find the best market. Other women would come from nearby villages, depending on the location of the sandpit that day, with petrol, fish, clothes and shoes, hoping to make sales in these temporary spaces of consumption (Figure 4). For some women, selling in the sandpits was a better option than selling in a village or Accra, where rents were higher. Moreover, the sandpits offered an inflated economy; as a woman selling bread and drinks explained, 'If something is selling for two and a half cedis, you can sell it here for three cedis. If it's three cedis, you can sell it for four.'

This kind of work, however, was hard. Over time, as I listened to women share their experiences of working in the sandpits, I gained a sense of how these mobile sand frontiers were experienced. After preparing eggs, bread and tea, Ama shared her history of moving with the sands. She recalled how she had been working in the sandpits for thirty years, having moved with them from places such as Ablekuma and Amasaman. 'Back then,' she explained, 'it was hand loading, everyone was using their hands. The trucks were smaller too. Ten years ago, the trucks changed and the machines came too.' She explained that people move with the sandpits, picking up their belongings as they go. Each working day she would bring what was required to prepare and sell hot food, including a wooden table, plastic stools, gas, water and food ingredients.

It's tiring work. Sometimes you can come and not sell too much. The market is on and off. Sometimes we have to move to another pit. And then we have to walk with our things . . . Your waist becomes sick. Many of the other women have stopped because they're tired, they want to find another job.

Ama's accounts of the labour involved in providing those working in the sandpits with sustenance seemed to stress the embodiment of these frontiers. On the ground, these feminized reproductive labours were vital to producing mobile economies that enabled companies such as Piam to shift the sandpit.

Other facets of the sand economy kept the sandpit shifting and exposed the embeddedness of sand extraction in spaces beyond the limits of the pit. For example, if machines were out of fuel, young men would bring supplies from small petrol stations nearby, where fuel was stored in yellow containers and distributed to vessels via a hand pump. At the city's limits, formal fuel supply was limited and thus small-scale informal petrol stations were important institutions in the sand economy. The fuel was carried in what had long been politicized as 'Kufuor gallons'. These 'gallons', which would have once carried Frytol oil, became synonymous with John Kufuor's ruling years (2001–09), which were marked by a depleted water supply in Accra. During this time, they functioned as containers for collecting, transporting and storing water sourced from various supply points in the city. In one of their newest lives, the containers had become an artistic medium in the work of Serge Clottey, where they morphed into high-end sculptures that hung from the walls of the new Kempinski hotel in downtown Accra, among other spaces in the city. Now, as I watched the yellow vessels transport fuel to bulldozers, they seemed to embody yet another life in these sandy landscapes. They were the vessels that kept things in motion, kept the sandpits shifting and kept the city supplied with sand.

Meanwhile, men occupied the very edges of the sandpit, collecting sand with a shovel and loading it into small carts attached to a moped. This, I was told by someone at Piam, was 'allowed'. They were probably living close by and building something for themselves. Indeed, an employee explained that, as long as they did not bring large trucks, it was generally allowed, proclaiming that it was Piam's 'social responsibility'. This kind of social responsibility was also enabled by the very materiality of the pits and sand's liquidity once it came to the surface. Indeed, once the topsoil was removed, sand was a material that was accessible to all those who came to the pit, requiring only a spade and a cart to be collected. Whether through the perceived difficulty, a

lack of desire, or indeed a sense of citizenship, little effort was made to police the boundaries of the pit – in this instance, its edges were open and available to all those who came to make a collection.

Thus, the sandpit was more than just a space; it was a material event that leaked into its surroundings, and into which its surroundings leaked in turn. The unearthing of sand was a moment when the material properties of its extraction – whether the shifting nature of the sandpit or the susceptibility of sand to being collected by nearby residents – presented opportunities where value could be extracted from the otherwise exclusive transactions of sand. This process of extraction was also apparent once sand left the pit and moved towards the city on tipper trucks.

### **Potholes**

The transportation of sand from the pit to the city had to respond to the shifting location of the sandpit. Once sand from a relatively small pit has been exhausted, the contractors move to a new plot of land to unearth the sand there. The tippers reacted to the shifting geography of the sandpit, following the flags that were regularly repositioned. Thus, while tippers generally moved in similar directions, each day, as they both collected and delivered sand, their route was subject to change. In this way, a ‘trip of sand’ was an unfolding field of interactions that was repeatedly carved out in different ways across the Greater Accra region. The more trips I took with the tipper drivers, the more this unfolding field of interactions emerged to me as a significant site for the extraction of incomes, beyond the landowner, contractor, tipper driver, consumer and even the pit itself. These relations, I suggest, are integral to the way in which sand became part of the life of the city and an alternative to its implication in the production of the hard concrete city.

During one of my first trips of sand with Francis and Kwaku, we drove through the town of Ashalaja and the north-west of Greater Accra towards the boundary that separated the eastern part of the Central region and the southern part of the Eastern region. With little space to swerve around its edges, a deep depression drew the truck into it. As we rose, the truck rattled and we regained our balance. Francis said that Howo trucks – the type of truck we were in – were good for the roads out here since they have excellent suspension, giving them the capacity to dip and dive across the uneven roads. He explained that these trucks, imported from China, had begun appearing on the roads around seven years earlier. Prior to this, the most widely used trucks were European or American; these were expensive, and, while their engines lasted a long time, their springs weren’t as good – they were vulnerable to snapping due to the frequent stress. The Howo trucks would most likely suffer engine failure within four or five years, he suggested, but within this timeframe, they required little maintenance and could get the job done. The potholed roads he was describing were those at the edges of Accra; funds may be less likely to be directed there and timeframes for repair and general maintenance were understood to be longer. Moreover, it was widely recognized that sand trucks were in part to blame for the poor condition of the roads, burdening the concrete with tonnes of sand, year after year. While limited in their long-term performance, the ability of Howo trucks to respond to a network of potholed roads – a situation in which they themselves might be implicated – was considered paramount. In this way, the material landscape in

which the sandpits were located was marked by the uneven roads of peri-urban and rural Accra, and this in turn shaped the kind of technology required to keep trucks mobile and the sand shifting.

Potholes were significant in shaping engagements as sand moved from pit to city. We regularly passed people moving sand and gravel to fill both deep and shallow depressions in the road. This, Francis explained, was a regular practice, performed by those looking to make two or three cedis from passing truck drivers who were sometimes grateful for their service. 'Sometimes we dash [give] them small,' he said. 'But not always.' This practice was visible on roads close to sites of sand consumption and also on stretches of road at the rural edges of the region. Men, women and children evening out the road with sand thus became a familiar sight as we moved from pit to city, city to pit. There was no guarantee that they would receive an income for their service; it therefore represented a speculative form of work that sought to extract potential value from the movement of sand. At times frustrated by this uncertainty, young men might occupy the roads and be more demanding, explicitly requesting money from drivers. On one occasion, a small group of young men, clearly frustrated by the ability of drivers to navigate around the potholes and pass without payment, had moved a large branch from a tree and placed it across the road, preventing any vehicle from passing without stopping and engaging in some form of (monetary) exchange. While unspoken, the threat of a potential confrontation was one that drivers recognized and responded to.

Much like De Boeck and Baloji's (2016) interpretation of the productivity of potholes in Kinshasa, the shifting of sand in, around and through the pothole produced negotiated spaces of exchange. In their analysis, De Boeck and Baloji describe the ways in which potholes worked to slow people down, redirecting pedestrian flow and traffic, offering new opportunities for commerce, while also presenting an occasion for 'refilling' services. They write that it is these 'vulnerable infrastructures [that] impose their own spatial and temporal logic on the city. They close off many possibilities, but they also create new social infrastructures, alternative spheres of social interaction, and different coping strategies' (*ibid.*: 11). Situating their analysis within a conversation surrounding infrastructure more broadly, they write that these 'syncopated rhythms . . . also generate new possibilities and opportunities, as well as different kinds of spaces' (*ibid.*: 108). This urban 'syncopation' is read as presenting both limits and opportunities, yet it is significant in an understanding of how the city is lived. Indeed, in this reading of a politics of syncopation, they argue that 'small scale modes of action that punctuate such urban living provide residents with an urban politics of the possible. Often these unsteady, provisional and continually shifting possibilities and action schemes are all that is available to urban dwellers; it is, therefore, impossible to underestimate their importance' (*ibid.*: 108).

In the material lives of shifting sand, perhaps the most extreme form of syncopation centred on a collapsed bridge near Ashalaja – a growing town on the western periphery of the Greater Accra region. The story of this syncopation unfolded on a trip of sand. Following an uneasy journey over rough roads, we passed onto smooth terrain; in front of us a steel bridge lay stretched out ahead. Francis pointed to a dislocated steel structure that hung precariously over the Densu River, running parallel to us. It was the bridge that had formerly served as the passage from Ayikai Doblo to Ashalaja, but it had collapsed in a fatal accident in 2015. Gradually tested by the

weight of trucks loaded with sand, the structure had succumbed to a tipper truck, sinking quickly into the water, taking with it the life of the driver. This new bridge had been open for only a few months.

In later conversations, Francis recalled the temporary bridge that was constructed during the time when the new bridge was being built. I was told that a man had seized the opportunity to construct a makeshift bridge by lining up four concrete tunnels across the river, allowing the water to flow through them when the river was high. He used sand to bring the top of the tunnels level with the road either side of the river, allowing one lorry to pass at a time. When the sand was worn or washed away, Francis continued, they brought more sand to level it out. Francis explained:

You would pay twenty cedis when you come back from the bush with your sand. When you go four times, it was eighty cedis. There are plenty of tipper trucks, so the guy was making a lot of money. You can't say you won't pay because big men are standing there. If you say no, they will throw a stone at the glass.

I asked how long it was like that for, and he replied: 'It was that way for six months. It made it more expensive, and you made less money.' Indeed, as Francis lamented, this extra cost could mean that, in a week, you might be required to make several extra trips to balance this new expense in the equation of a sand trip. In this narrative, the shifting of sand made, unmade and remade the city in its image. In doing so, it gave rise to moments when the transactions embedded in sand could be rewritten, even if only temporarily.

Tracing the empirical details of shifting sand as it moved from pit to city thus exposes the livelihood practices that extend beyond the sandpit. These details also reveal the ways in which livelihood practices become possible through the multiple materialities of sand and their differing temporalities. As a substance that can break down existing infrastructure, provide temporary repairs, and then be blown away again, sand was never a constant; rather, it was a material in suspension that offered up moments for potential engagements, exchanges and, essentially, income. Indeed, transforming the socio-material landscape of the region as it moved, generating and engaging with a series of syncopations, sand in motion presented ongoing moments when value could be extracted, the terms of exchange could be remade, and new possibilities could come to the fore.

### **A share in the sands**

As the world continues apace with urbanization, it seems important to ask what kinds of livelihoods will be made possible for the 'urban majority' (Simone 2018). As agricultural land is swallowed up and new real estate crystallizes unequal power relations (Simone and Pieterse 2017), what forms of living and methods of livelihood can – and, indeed, should – be sustained? This article has deployed sand as a potential way in which to examine contemporary livelihoods and living in Accra – an expanding metropolitan region in West Africa. Situated in the space between a hard city of concrete and a fluid city of negotiation, sand has been presented as a material entry



point into the ways in which urban livelihoods are elaborated. Moving from trips to pits to potholes, the article has attended to the materialities of sand and its extraction, looking at the substantial behaviours and temporal junctures of sand as it shifts its shape, form and direction. In doing so, it brings to the fore the ways in which sand emerges as a platform for exchange, negotiation and ultimately income, making it possible to see sand as a social infrastructure as much as an infrastructure of the concrete city. Yet, I also suggest that it might be possible to think of sand as a political infrastructure.

The many labours embedded in the expanded material economies of sand speak to the difficulties of securing work in Accra and its peripheries. Indeed, this economy is a testament to the sheer energy, improvisation and ingenuity required to make a living in an economy where, in the words of an interlocutor, the ‘market is not easy’ – nor is it fair. In this way, the broader extractive economy of sand exposed yet another perspective on a difficult urban life, in which inhabitants are made to think deeply and relentlessly about potential values hidden in the shifting sands of the city. However, beyond improvisation, perhaps the most revealing facets of this extractive economy were the practices that were not so much determined by the creation of a service but rather were something closer to a demand. Indeed, watching young men simply take sand from the sandpit or demand money from a tipper on a potholed road hinted at a different kind of practice: a distributive demand directed to the values flowing from sand, from which they were otherwise excluded. I do not suggest that these actions should be romanticized as a form of resistance to extractive economies, and I recognize the need to consider how these claims might be better directed towards truck owners and landowning groups rather than drivers or mates on the road. Yet, I think it might be possible to discern a set of questions emerging from such demands. If cities continue to expand with limited opportunities for reasonable working lives, perhaps the city needs to be rethought as a place where value can be claimed, distributions called for and incomes demanded. Thus, if a right to space and housing has been widely politicized, could a right to an urban income be too? What would a de-linking of labour and income in the city actually look like? And how could this extend beyond the city itself? What would a demand not just for a job but for a flow of resources look like? What kinds of claims could be made, and on which flows? And what would these necessarily multi-scalar (global) geographies look like?

In an analysis of new welfare states in Southern Africa, Ferguson locates an emergent politics in the ideas and practices of cash transfers and universal basic income. Here, ‘such a politics is based on a kind of claim-making that involves neither a compensation for work nor an appeal for “help” but rather a sense of a rightful entitlement to an income that is tied neither to labor nor to any sort of disability or capacity’ (Ferguson 2015: 183). In this reading, the vast mineral wealth that undergirds the economies of Southern Africa are reconceptualized as awaiting distribution among the region’s inhabitants. Ferguson argues that, instead of positioning this distribution as a kind of market exchange or gift, this allocation of wealth points to ‘something more like demand sharing – a righteous claim for a due and proper share grounded in nothing more than membership (in a national collectivity) or even simply presence’. It is ‘this (emergent, only partially realized) politics’ that he locates as ‘the politics of the rightful share’ (*ibid.*: 184). While Accra’s mineral wealth is on an entirely different scale and degree, the city’s sand economy could point to a set of

distributive claims: a rightful share to the unfolding wealth of a city from which many find themselves excluded. Beyond performing a service – such as preparing food or filling potholes – taking sand from the edges of the pit and simply demanding payments from passing trucks mark a different kind of claim on the values flowing from sand. Is this a rightful share, or is it something else? Does a rightful share map onto this space – onto a city in a country with a history that differs from those of the states of Southern Africa? Perhaps not.

In this uncertain vein, far from providing a solution to historically produced conditions of poverty and inequality, I piece together *a share in the sands* as a tentative holding space for the many claims made on sand, arguing that they might be read as an emergent politics of claiming a share of the values flowing unevenly from the extraction of this grainy material. Tuning in to the sandy geographies of Accra has offered just one means of thinking through the way in which urban majorities mark out a share in the uncertain ground of the city, yet it also hints at a broader point about the political potential embedded in urban materialities. I end with a call to stretch beyond sand, to consider the ways in which the materiality of the city more broadly emerges as a contingent platform upon which disparate claims to an income, a life and an urban future might be made. In this vein, *a share in the sands* becomes both a rallying call and a conceptual space for drawing together the always already existing political possibilities embedded in material city-making.

**Acknowledgements.** I am incredibly grateful to those in Accra who generously shared their knowledge and time with me. In particular, my thanks go to Christabel Bannerman. Thank you to the reviewers, who pushed the article forward in important directions. This research was undertaken as part of an ESRC PhD studentship (grant number 1509522) at LSE's Department of Geography and Environment. Thank you to my supervisors Claire Mercer and Austin Zeiderman for their support and insights throughout the PhD process.

## References

- Abdychev, A., C. Alonso, E. Alper, D. Desruelle, S. Kothari, Y. Liu, M. Perinet, S. Rehman, A. Schimmelpfening and P. Sharma (2018) *The Future of Work in Sub-Saharan Africa*. Washington DC: International Monetary Fund.
- Adom, D., J. Adu-Mensah and S. Appiah (2020) 'Hand-to-mouth work culture and the COVID-19 lockdown restrictions: experiences of selected informal sector workers in Kumasi, Ghana', *Research Journal in Advanced Humanities* 1 (2): 45–63.
- Akubia, J. and A. Bruns (2019) 'Unravelling the frontiers of urban growth: spatio-temporal dynamics of land-use change and urban expansion in Greater Accra metropolitan area, Ghana', *Land* 8 (9): 131.
- Amankwaa, E. F. (2013) 'Livelihoods in risk: exploring health and environmental implications of e-waste recycling as a livelihood strategy in Ghana', *Journal of Modern African Studies* 51 (4): 551–75.
- Amoah-Nuamah, J. et al. (2020) 'Covid-19 pandemic partial lockdown in Ghana and its implications on livelihoods of informal workers in affected communities', *Journal of Economics and Sustainable Development* 11 (8): 35–40.
- Anokye, N., J. Mensah, H. Potakey, J. Boatend, D. Essaw and E. Tenkorang (2022) 'Sand mining and land-based livelihood security in two selected districts in the Central region of Ghana', *Management of Environmental Quality* 1477–7835.
- Asante, L. and R. Mills (2020) 'Exploring the socio-economic impact of Covid-19 pandemic in marketplaces in urban Ghana', *Africa Spectrum* 55 (2): 170–81.
- Bukari, C. et al. (2021) 'Impact of COVID-19 on poverty and living standards in Ghana: a micro-perspective', *Cogent Economics and Finance* 9 (1).

- Choplin, A. (2020) 'Cementing Africa: cement flows and city-making along the West African corridor (Accra, Lomé, Cotonou, Lagos)', *Urban Studies* 57 (9): 1977–93.
- Dawson, K. (2021a) 'Geologising urban political ecology (UPE): the urbanisation of sand in Accra, Ghana', *Antipode* 53 (4): 995–1017.
- Dawson, K. (2021b) 'Under the wire: splintered time and ongoing temporariness in Accra's electropolis', *City* 25 (1–2): 27–45.
- De Boeck, F. and S. Baloji (2016) *Suturing the City: living together in Congo's urban worlds*. London: Autograph ABP.
- Denning, M. (2010) 'Wageless life', *New Left Review* 66: 79–97.
- Diouf, M. and R. Fredericks (2014) *The Arts of Citizenship in African Cities: infrastructures and spaces of belonging*. New York NY: Palgrave Macmillan.
- Edmond, C. (2019) 'Ghana will grow faster than any other economy this year, the IMF says why', WeForum.org, 24 May <<https://www.weforum.org/agenda/2019/05/ghana-is-set-to-be-the-worlds-fastest-growing-economy-this-year-according-to-the-imf/>>, accessed August 2021.
- Ernstson, H., M. Lawhon and J. Duminy (2014) 'Conceptual vectors of African urbanism: "engaged theory-making" and "platforms of engagement"', *Regional Studies* 48 (9): 1563–77.
- Ferguson, J. (2015) *Give a Man a Fish: reflections on the new politics of distribution*. Durham NC: Duke University Press.
- Ferguson, J. and T. M. Li (2018) 'Beyond the "proper job": political-economic analysis after the century of labouring man'. PLAAS Working Paper 51. Bellville: Institute for Poverty, Land and Agrarian Studies.
- Gillespie, T. A. (2016) 'Accumulation by urban dispossession: struggles over urban space in Accra, Ghana', *Transactions of the Institute of British Geographers* 41 (1): 66–77.
- Grant, R. (2009) *Globalizing City: the urban and economic transformations of Accra, Ghana*. New York NY: Syracuse University Press.
- Grant, R. and M. Oteng-Ababio (2012) 'Mapping the invisible and real "African" economy: urban e-waste circuitry', *Urban Geography* 33 (1): 1–21.
- Hart, K. (1973) 'Informal income opportunities and urban employment in Ghana', *Journal of Modern African Studies* 11 (1): 61–89.
- Hart, K. (2006) 'Bureaucratic form and the informal economy' in B. Guha-Khasnabis, R. Kanbur and E. Ostrom (eds), *Linking the Formal and Informal Economy: concepts and policies*. Oxford: Oxford University Press.
- ILO (2016) *World Employment Social Outlook: trends 2016*. Geneva: International Labour Organization (ILO).
- Jamieson, W. (2021) 'For granular geography', *Dialogues in Human Geography* 11 (2): 275–93.
- Kothari, U. and A. Arnall (2020) 'Shifting sands: the rhythms and temporalities of island sandscapes', *Geoforum* 108: 305–14.
- Lamb, V. and Z. Fung (2022) 'Expanding transboundary environmental governance: a mobile political ecology of sand and shifting resource-based livelihoods in Southeast Asia', *Environmental Policy and Governance* 32 (4): 281–91.
- Lamb, V., M. Marschke and J. Rigg (2019) 'Trading sand, undermining lives: omitted livelihoods in the global trade in sand', *Annals of the American Association of Geographers* 109 (5): 1511–28.
- Langevang, T. and K. Gough (2012) 'Diverging pathways: young female employment and entrepreneurship in sub-Saharan Africa', *Geographical Journal* 178 (3): 242–52.
- Marschke, M. and J. Rousseau (2022) 'Sand ecologies, livelihoods and governance in Asia: a systematic scoping review', *Resources Policy* 77.
- Marschke, M., J. Rousseau, L. Beckwith, L. Arragon and E. Espagne (2021) 'Displaced sand, displaced people: examining the livelihood impacts of sand mining in Cambodia', *AFD Research Papers* 205: 1–22.
- Mbembe, A. (2017) *Critique of Black Reason*. Translated by L. Dubois. Durham NC and London: Duke University Press.
- Mendelsohn, B. (2018) 'Making the urban coast: a geosocial reading of land, sand, and water in Lagos, Nigeria', *Comparative Studies of South Asia, Africa, and the Middle East* 38 (3): 455–72.
- Mo Ibrahim Foundation (2018) *Ibrahim Index of African Governance: index report*. London: Mo Ibrahim Foundation.
- Murray, M. J. and G. Myers (2006) *Cities in Contemporary Africa*. New York NY: Palgrave Macmillan.
- Myers, G. (2011) *African Cities: alternative visions of urban theory and practice*. London: Zed Books.
- Myers, G. (2016) *Urban Environments in Africa: a critical analysis of environmental politics*. Bristol: Policy Press.

- Obeng-Odoom, F. (2012) 'Neoliberalism and the urban economy in Ghana: urban employment, inequality, and poverty', *Growth and Change* 43 (1): 85–109.
- Oduro, C. Y. and R. Adamtey (2017) 'The vulnerability of peri-urban farm households with the emergence of land markets in Accra', *Journal of Science and Technology* 37 (1): 85–100.
- Oteng-Ababio, M. (2012) 'When necessity begets ingenuity: e-waste scavenging as a livelihood strategy in Accra, Ghana', *African Studies Quarterly* 13 (1–2): 1–21.
- Parker, J. (2000) *Making the Town: Ga state and society in early colonial Accra*. Portsmouth NH: Heinemann.
- Pieterse, E. (2008) *City Futures: confronting the crisis of urban development*. London: Zed Books.
- Pieterse, E. and A. Simone (2013) *Rogue Urbanism: emergent African cities*. Cape Town: Jacana Media in association with African Centre for Cities, University of Cape Town.
- Quayson, A. (2014) *Oxford Street Accra: city life and the itineraries of transnationalism*. Durham NC: Duke University Press.
- Simone, A. (2004) *For the City Yet to Come: changing African life in four cities*. Durham NC and London: Duke University Press.
- Simone, A. (2009) *City Life from Jakarta to Dakar: movements at the crossroads*. London: Routledge.
- Simone, A. (2018) 'The urban majority and provisional recompositions in Yangon', *Antipode* 50 (1): 23–40.
- Simone, A. and E. Pieterse (2017) *New Urban Worlds: inhabiting dissonant times*. Cambridge: Polity Press.
- UNEP (2019) *Sand and Sustainability: finding new solutions for environmental governance of global sand resources*. Nairobi: United Nations Environment Programme (UNEP).
- Yirenkyi, A. (2020) 'Ambra Afua Yirenkyi's thoughts ... making the case for universal basic income', *bftonline.com*, 8 June <<https://thebftonline.com/08/06/2020/making-the-case-for-universal-basic-income/>>, accessed August 2021.
- Zalasiewicz, J., C. Waters and M. Williams (2017) 'City-strata of the Anthropocene', *Annales: Histoire, Sciences Sociales* 72 (2): 329–51.

**Katherine Dawson** is a Lecturer in Environment, Politics and Society at University College London and a visiting fellow at the London School of Economics. Her work examines geological politics, geo-ethics, mining and urbanism. More recently, her work has expanded to consider a wider set of geological materials, including platinum and the politics of its extraction in North West Province, South Africa, as well as thinking through diatomite and polyhalite extraction in New Zealand and the UK.