

THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

SHIFTING SANDS IN ACCRA, GHANA:
THE ANTE-LIVES OF URBAN FORM

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DECLARATION

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ABSTRACT

This thesis thinks with sand and its fundamental relationship to the making of the city. Sand is a material of our shared contemporary. Constituting roads, buildings, fracking technologies, computer chips, glass and land itself, this grainy material is at ‘the core of our daily lives’ (Beiser, 2018:2). This ubiquity has generated global demand, with sand and gravel constituting the largest volume of solid material extracted worldwide (UNEP, 2014). Yet, despite the centrality of sand to our social reproduction, as well as evidence of its eco-political implications (Beiser, 2018), limited academic work has engaged with this material. Drawing on fourteen months of ethnographic fieldwork in the expanding West African city of Accra, this thesis unpacks more specifically the processes through which sand is drawn into the urban process, or indeed urbanised. While sand – mixed with cement and water – is destined to become part of the city’s expanding urban form, this thesis looks instead to the processes that take shape prior to sand’s manifestation as the material building blocks of the city. In this way, this thesis details the before lives – or ante-lives – of urban form. The thesis details the practices of extraction from mines at the sprawling edges of Accra, engages with the labours that surround sand’s extraction and movement and deploys innovative ways of scripting the anxious worlds of the city’s shifting landscapes. In this way, the thesis shows that urbanisation must be understood as a set of unfolding interfaces between geologic forces, ecological processes, historical conditions, cultural forms and political-economic regimes. Together, the chapters in this thesis present a significant contribution at the articulation of urban political ecology (UPE), geosocial analyses, extractivism, [African] urbanism, postcolonialism, labour practices and ethnography, meanwhile offering up novel ways of reading the shifting landscapes of Accra’s ‘urban now’ (Baloji and De Boeck, 2017).

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CONTENTS

-1- INTRODUCTION: THE ANTE-LIVES OF URBAN FORM	9
ANTE-LIVES	9
CITIES OF SAND	16
NEW GEOGRAPHIES OF SAND	21
FROM GA MAJII TO A 'VARIEGATED AND CONTRADICTIONARY METROPOLIS'	25
SAND AS THE CITY'S CONSTITUTIVE OUTSIDE	33
THESIS STRUCTURE	36
-2- SHIFTING WITH THE SANDS: METHODS, IDEAS, PEOPLE AND THINGS	41
INTRODUCTION	41
OPERATION VANGUARD	41
POSTCOLONIAL URBAN RESEARCH	44
AWOSHIE JUNCTION	49
WRITING THE WORLD FROM AWOSHIE JUNCTION	57
SHIFTING SANDS	63
THE SHIFTING SANDPIT	65
-3- LITERATURE REVIEW: UNEARTHING A CITY OF SAND:	68
UNEARTHING A CITY OF SAND	68
URBANISING SAND IN ACCRA	70
GEO-HISTORY	74
EXTRACTIVE INDUSTRIES	78
EXTRACTIVE URBANISM	84
URBAN POLITICAL ECOLOGY	88
CONCLUSION	93
-4- THE SHIFTING SANDPIT: EXTRACTING SAND IN AND FOR A POSTCOLONIAL CITY	96
THE SHIFTING SANDPIT	96
THE SHIFTING CONTOURS OF SANDPIT AND CITY	96
THE GEOSOCIAL SANDPIT	101
UNEVEN NATURES	103
SECURING LAND AND SECURING SAND	107
GEOHISTORY	109
POST-COLONIAL LAND TENURE	117
CONTEMPORARY EXTRACTION	118
SECURING THE PIT	121
EXTRACTING SAND IN AND FOR A POSTCOLONIAL CITY	123
-5- LABOURS OF SAND: RETHINKING URBAN EXTRACTION	126
LABOURS OF SAND	126
LIFE AT AWOSHIE JUNCTION AND BEYOND	126
BEYOND THE "PROPER JOB"	129
URBAN RICHES	133
A TRIP OF SAND	136
LABOURS OF SAND	140

POTHLES	144
A RIGHTFUL SHARE	148
THE URBAN FUTURES OF EXTRACTION	151
 -6- THE ANXIOUS ANTE-LIVES OF URBAN FORM: SAND, SUSTAINABILITY AND SECURITY	
NOSTALGIA FOR AN URBAN FUTURE	153
ANXIETY AND THE AFRICAN CITY	154
FUTURES SET IN CONCRETE?	157
ECOLOGICAL ANXIETIES	161
SUBTERRANEAN VALUES	164
SECURING SANDY PERIPHERIES	173
THE ANXIOUS ANTE-LIVES OF URBAN ELSEWHERE	179
 -7- CONCLUSION: SHIFTING SANDS IN ACCRA	
URBANISING SAND IN ACCRA	182
VANISHING POINTS AND PARTIAL TRUTHS	182
RELATIONSHIPS	182
REFLEXIVITY	184
REPRESENTATION	190
ETHICS	191
BUILD AFRICA BLOCK FACTORY	193
EXTRACTIVE FUTURES	200
SHIFTING SANDS AS AN URBAN CONDITION	200

LIST OF FIGURES

Figure 1 - Ashalaja Town Centre in relation to central Accra. (Google Maps, 2019)..	13
Figure 2 - Map of Awoshie (Google Maps, 2020).	49
Figure 3 - Awoshie Junction (Google Maps, 2020).	50
Figure 4 - 'The Political Hierarchy of the Ga State' (Firmin-Sellers, 1996: 39).	114

LIST OF TABLES

Table 1 'Accra: Political Structure and Mantsemei, 1860s-1920s' (Parker, 2000:15)	26
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LIST OF IMAGES

<i>Image 1- Blocks, sand and homes near Ashalaja.</i>	10
<i>Image 2 - 'Blocks 4 sale' near Ashalaja.</i>	14
<i>Image 3 - Window onto the sandpit.</i>	17
<i>Image 4 - Building blocks.</i>	18
<i>Image 5- Purple skies at Awoshie Junction.</i>	22
<i>Image 6 - City lights.</i>	25
<i>Image 7 - Passing figures at Awoshie Junction.</i>	30
<i>Image 8 - 'New urban worlds.'</i>	32
<i>Image 9 - Urban edges.</i>	33
<i>Image 10 – Family.</i>	40
<i>Image 11 - Beauty on the wall.</i>	43
<i>Image 12 - Salon days.</i>	45
<i>Image 13 - Preparing egg, bread, tea and Indomie.</i>	48
<i>Image 14 - Shop portrait.</i>	48
<i>Image 15 – Indomie.</i>	51
<i>Image 16 - Preparing water sachets for sale.</i>	54
<i>Image 17 - Junction in motion.</i>	55
<i>Image 18 - Awoshie quarters.</i>	59
<i>Image 19 - Under the wire.</i>	61
<i>Image 20 - Upon a sand truck.</i>	63
<i>Image 21 - Labours of sand.</i>	66
<i>Image 22 - Nearby residents come to the sandpit.</i>	69
<i>Image 23 - Urban beginnings at the edges of a sandpit.</i>	72
<i>Image 24 - A stone quarry in the Eastern Region of Ghana.</i>	75
<i>Image 25 - Employees at the sandpits.</i>	79
<i>Image 26 - Living near a sandpit.</i>	83
<i>Image 27 – Urban nature.</i>	89
<i>Image 28 – Drying blocks.</i>	91
<i>Image 29 - Performing duties of the mate.</i>	93
<i>Image 30 - Flag planted at the roadside, indicating the location of sandpits.</i>	97
<i>Image 31 - Entrance to a sandpit.</i>	102
<i>Image 32 - Edges of a sandpit.</i>	104
<i>Image 33 - Pacing a sandpit.</i>	105

<i>Image 34 - A researcher's motorbike.</i>	109
<i>Image 35 - A Piam employee.</i>	117
<i>Image 36 - A mate anxiously loads sand ahead of the impending rain.</i>	122
<i>Image 37 - A Piam employee shares his knowledge of sand.</i>	123
<i>Image 38 - Spectators.</i>	124
<i>Image 39 - Discussing the sandpit.</i>	125
<i>Image 40 - A long-term resident and Father at Awoshie Junction.</i>	128
<i>Image 41 - Looking into the future.</i>	129
<i>Image 42 – Business women at Baah Yard.</i>	132
<i>Image 43 - Pure Water.</i>	132
<i>Image 44 - Preparing drinks to sell on the road.</i>	133
<i>Image 45 - Spectators at the sandpit.</i>	135
<i>Image 46 - Fire at the junction.</i>	137
<i>Image 47 - Di Nokore.</i>	138
<i>Image 48 - A view from inside.</i>	139
<i>Image 49 - Setting up market at the sandpit.</i>	141
<i>Image 50 - Displaying drinks for sale at the sandpit.</i>	141
<i>Image 51 - Making sales.</i>	142
<i>Image 52 - Gao Gao petrol station on the road to Hobor.</i>	143
<i>Image 53 - Stone quarry in the Eastern Region.</i>	144
<i>Image 54 - Selling clothes at the sandpit.</i>	144
<i>Image 55 - Counting trucks at the sandpit.</i>	146
<i>Image 56 - Sandpit spectators.</i>	148
<i>Image 57 - Sisters at the sandpits.</i>	151
<i>Image 58 - Presence.</i>	152
<i>Image 59 - Selling petrol at the sandpits.</i>	152
<i>Image 60 - Windows of the world.</i>	154
<i>Image 61 - Concrete futures?</i>	158
<i>Image 62 - A walling unit on governemnt reservation land.</i>	159
<i>Image 63 – Sandpit without reclamation.</i>	162
<i>Image 64 - Fertilising pineapples.</i>	166
<i>Image 65 – A husband and wife show me their farmland as it was mined for sand.</i>	168
<i>Image 66 – Entrance of a sandpit.</i>	170
<i>Image 67 - A woman returns to her farmland following the extraction of sand.</i>	171
<i>Image 68 - Fields adjacent to the sandpit.</i>	172
<i>Image 69 - A sand galamsey site.</i>	175
<i>Image 70 - Looking out onto an illegal sand winning site.</i>	179
<i>Image 71 - Road to a sandpit.</i>	180
<i>Image 72 - Neighbours at Awoshie Junction.</i>	181
<i>Image 73 - Evenings at Awoshie Junction.</i>	189
<i>Image 74 - Perfecting a presence.</i>	191
<i>Image 75 - Family.</i>	192
<i>Image 76 - Build Africa.</i>	194
<i>Image 77 - The block building process.</i>	195
<i>Image 78 – Contemplating.</i>	197
<i>Image 79 - Piam employees.</i>	198
<i>Image 80 - Elusive figures.</i>	201

INTRODUCTION: THE ANTE-LIVES OF URBAN FORM

ANTE-LIVES

If you leave Anyaa-Awoshie Road¹ at Ablekuma Junction, just after FanMilk Junction, and continue to follow the road north-west, you will, if travelling by car, reach Ashalaja Bridge in no longer than 15 minutes (see fig.1). This concrete bridge will allow you to glide over the Densu River, which, during certain months of the year, races beneath you. Following the only road ahead – somewhere between densely urban Accra and the region's rural edges – you will, in a matter of minutes, reach the growing town centre of Ashalaja. Ashalaja appears as both its own place and yet hardly distinguishable from places around it. It morphs into the surrounding landscape as neither village, nor urban, nor rural. Its defining space is a junction, allowing you to pass north towards Hobor, or past West towards Danchira and the Central Region. Here, the junction's edges are lined with items for sale: fried yam, building blocks, spare parts of cars – while both taxi and motorbike drivers occupy station posts, calling out for custom.

After months of moving through this town, I had the privilege of being introduced to an elder, who in a compelling conversation vividly evoked Ashalaja's history. He recalled that the town had been but a passing place on the path to the Eastern Region. By the 17th century, he explained, this passing place had become synonymous with a man who brought fish from the nearby Densu River to sell – hanging his goods from the branches of the surrounding trees. 'Everyone knew, if you wanted to buy fish, you could find it here,' he reiterated. The elder continued his story, explaining that the fisherman's name was Ashale. *Ja* – the *Ga* word for market – was added to form Ashale-*ja*. Over time, and through the passing of the word through many mouths, the name was corrupted to Ashalaja. As he reflected on the history of the town, the elder expressed that Ashalaja had until recent decades remained small and was an area characterised by fishing and the farming of vegetables, cereals and maize.

Today, Ashalaja is a place in transition. Mr Frimpong, a local politician, described Ashalaja as a 'hotcake area. When you go to Ga South, it's Ashalaja. Everybody wants to come to Ashalaja. In those

¹ The road that stretches from Awoshie to Pokuase.

days, if you mention Ashalaja, people say they won't come. But things have changed. Ashalaja is now open.' The phrase 'hotcake' denoted a product or service in demand. Freshly baked and ready for sale, a 'hotcake' is highly demanded and would soon be bought. Advertisements presenting plots for sale in Accra would often read 'hotcake plot of land for sale,' indicating that the plot of land is likely to be highly desirable and thus a prospective buyer should move fast. Mr Frimpong placed this demand into historical context, explaining that, 'it was around 1998-2000 when land started to be sold for building. At that time, there was no road, there was no bridge and the cost of land was low. You could get a plot out here for 50-70 Ghana cedis' [At the time of research, the cedi to US\$ exchange rate averaged at 5.69]. 'But today', he continued,

'a plot will cost somewhere between 10,000 and 12,000 Ghana cedis. At the roadside, a plot will be 35,000 [US\$ 6151.00] but plots at the roadside are all taken in this area now. You know, at first, the building was slow, but it became rapid around 2010, when the estate developers came in. Before then, companies would come and buy land for their workers, as rewards for their workers, like the Fire Service or the Cocoa Board. And individuals too were buying land and building. But it's picked up since around 2010.'



Image 1- Blocks, sand and homes near Ashalaja.

Ashalaja is one of many growing towns in the Greater Accra Region. Here, there is a sense of things taking off, or to rephrase Mr Frimpong, of 'opening up.' When I returned to Ashalaja in December

2018, just three months after leaving Ghana in July, Ashalaja's central taxi point had transformed from a small commercial zone to a central spot which now hosted the quintessential sounds of the city. This new soundscape owed its transformation, in large part, to the arrival of *tro tros*, which up until then, had not included a town like Ashalaja in their operating landscape. With *trotros* came the distinctive station megaphone which called out the destinations available for sale – Pokuase, Danchira, Kasoa, Amasaman – enwrapping Ashalaja into a stretching urban fabric of mobility, labour and sociality. While Ashalaja had a much longer history, there was a sense that these changes marked the beginning of something – an urban beginning. This sense of beginning was symbolised most aptly by the number of building blocks which littered the landscape. Indeed, in both Ashalaja and across the Greater Accra region more broadly, building blocks lined the sides of roads. They were arranged like dominoes in the quarters of block factories and they were stacked at the edges of plots of land. Stood among the anthills of Greater Accra – themselves 'seen as microcosms of human activity and as nodal points between the known world and world of the dead' (Parker, 2000) – the stacks of building blocks which littered the shifting edges of the city performed their own kind of symbolic mediation, as that between the now 'bush'² and the 'city yet to come' (Simone, 2004).

Indeed, these building blocks made the city materially possible. They would be arranged upon the earth's surface, from which homes, roads and commercial enterprises would take shape. In fact, building blocks, by definition, are 'the basic things that are put together to make something exist.'³ They are 'a unit of construction or composition' – as 'something essential on which a larger entity is based.'⁴ In this way then, the building block may well be interpreted as the underlying unit through which the city – as a thing, idea, process – is made. Yet, this thesis contends that building blocks symbolise more than simply a beginning to urban form. Rather, this thesis argues that building blocks signal a set of before lives – or ante-lives – to urban form. Indeed, the materiality, the labour and the spaces implicated in the production of these building blocks point to significant, yet under-acknowledged facets that undergird the production of the city. I argue that by splitting these blocks into their elemental composition, we begin to expose the ante-lives of urban form and in turn, the material making of urban beginnings.

² By bush, I refer to the meanings that were attributed to this word throughout my fieldwork, 'with its implication of land that has not yet been claimed for settlement and cultivation' (Quayson, 2014:41). Despite the fact that large tracts of land surrounding Ashalaja are farmed, 'bush' is used here to refer to un-urbanised land more broadly.

³ 'building block' (dictionary.cambridge.org, 2019).

⁴ 'building block' (merriam-webster.com, 2019).

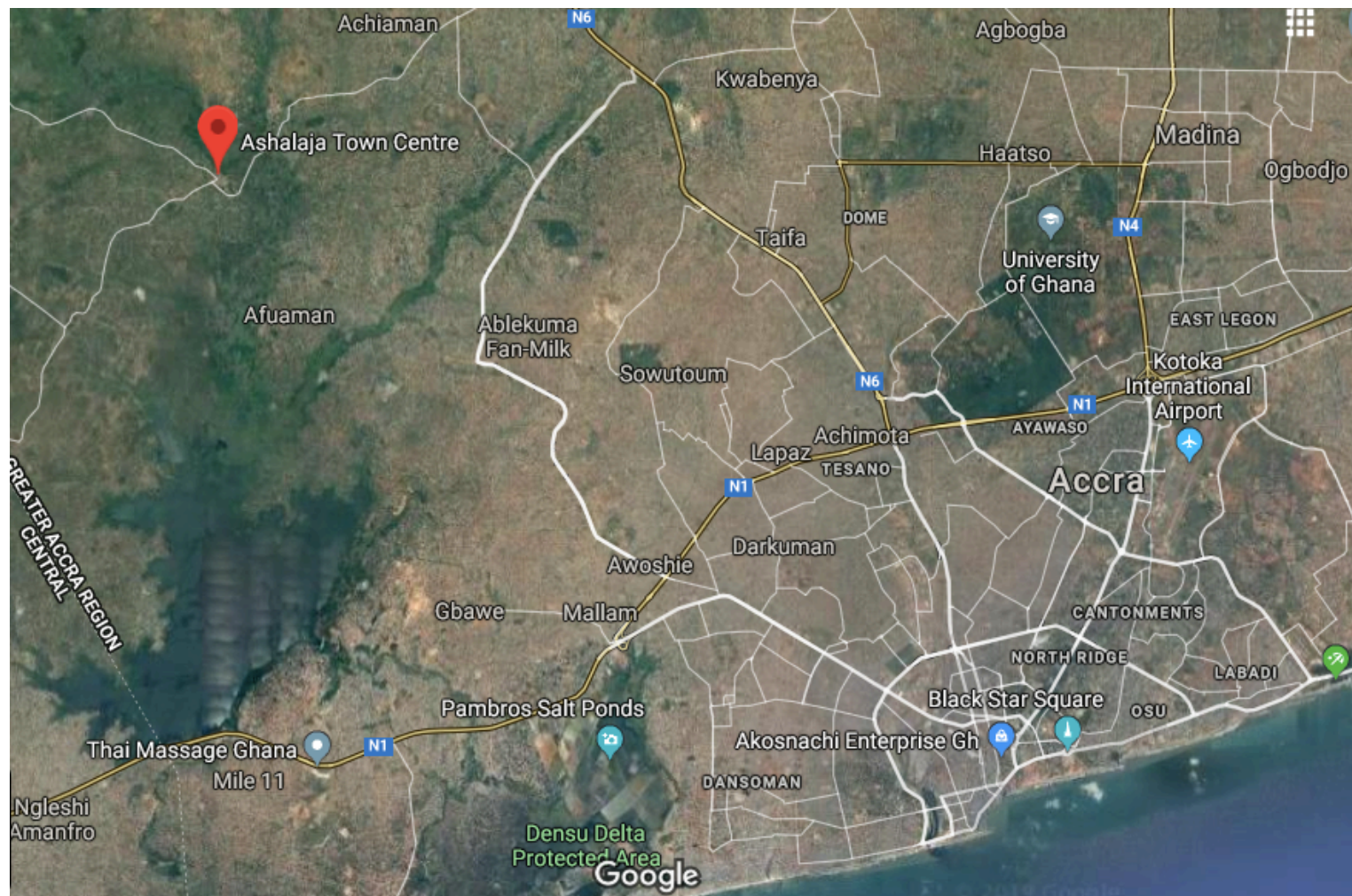


Figure 1 - Ashalaja Town Centre in relation to central Accra. Note also the location of Awoshie (Google Maps, 2019).

In Greater Accra, the building blocks of the stretching urban fabric are constituted, to a large degree, by three materials. Indeed, extracted from the grounds of the region's shifting edges, *sand* is mixed with smaller inputs of *cement*, the elements of which are activated by *water*. Compressed through the manual operation of block building machines, these three components – sand, cement, water – give rise to the building blocks of the city. Across the region, cement brands are advertised on huge billboards that loom over the city. *Ghacem*, for example, Ghana's largest producer of cement, presents itself as a force for national development, as 'the nation builder.' Commercial outlets selling cement paint brand logos across the materiality of their shops – *Dangote*, *Diamond*, *CIMAF* – while cement bags line the sides of roads, awaiting sale. While non-drinking water is not branded, its storage and movement are closely associated with yellow containers, which, to some degree, render it visible in the urban landscape. Yet sand is both brand-less, and to an outsider like myself, less visible in the urban landscape. It requires you to look a little closer to see the grains. It is often found in small mounds next to stacks of building blocks or bags of cement. It can also be found in the backs of trucks that transport the grains across the region or found at sand stations which temporarily host the material as it awaits sale.



Image 2 - 'Blocks 4 sale' near Ashalaja.

While sand is perhaps not an obvious commodity, it constitutes the material bulk of the city's building blocks and to that effect, is extracted from the ground beneath the city's edges at significant rates. Indeed, according to research at the Minerals Commission – the regulatory body for the management of Ghana's mineral resources – present estimates suggest that approximately 700-

1000 trucks of sand are extracted per day, Monday to Saturday, in the Greater Accra region. This amounts to the equivalent of nearly 6 million cubic metres per year, enough sand to fill Dubai's Burj Khalifa almost six times. Sand, I was told, is used for the construction of roads, houses, commercial units and foundations, constituting the city's material skeleton. And sand winning – the name given to the process of extracting sand from land – was presented as an unstoppable force. In an interview with an official at the Minerals Commission, it was explained to me, 'you can't stop sand winning. One out of every ten people needs sand every day. They're thinking of how to build.' So integral is sand to the city and nation that a researcher at the Commission announced current efforts to calculate the percentage of sand as part Ghana's national GDP, adding that 'sand is life; it's next to water.' As a core constituent of Accra's expanding materiality, this thesis positions sand as an entry point into the ante-lives of urban form.

The centrality of sand to the city's materiality is not unique to Accra. Environmental studies of sand winning in Ghana more broadly have pointed to the widespread practice, detailing its damaging effects to land and people as sand is extracted from rivers in the northern regions and from the beaches of the nation's coastline (Peprah, 2013; Arthur, 2016; Mensah, 2002; Jonah et al, 2015; Salifu, 2016). Indeed, extracted from pits, removed from beaches and dredged from river beds, sand makes up the concrete backbone of cities and towns, not just in Ghana, but across the planet more extensively. Yet, as I discuss in a later chapter, little work in the social sciences has engaged with this material. In arguments I flesh out later, this thesis contends that looking to the sandy ante-lives of urban form has much to offer in expanding our analysis of the socio-natural processes undergirding the making of our contemporary urban world. Indeed, in order to grasp urbanisation as a socio-natural phenomenon in all of its political-ecological manifestations, I argue that we must attend more closely to the material make-up of cities. I show that positioning sand as a material entry point into the city enables us to see urbanisation as a set of unfolding interfaces between geologic forces, ecological processes, historical conditions, cultural forms and political-economic regimes. It allows us to think through multiple temporalities and multiple spaces at once and the ways in which specific time-spaces come together in the present making of the city. Indeed, locating sand as a way into the city serves to depart from an emphasis on the inevitability of urbanisation and rather situates the current production of the city as a historically specific conjuncture of multiple forces, which in turn give rise to specific implications and set in motion future im/possibilities. These are positions that are given weight as I move through the thesis. With sand positioned as an entry point into the city, the remaining introductory chapter sets out the contours of the thesis. I do this by turning more closely to the position of sand within contemporary urbanisation processes, detailing the ways in which sand has been implicated in the making of cities. Turning to the imperatives of postcolonial urban studies and the widespread call for 'new geographies of theory' (Roy, 2009), this chapter

speaks of the significance of writing from Accra specifically. From here, I present the thesis' underlying questions and outline the core contributions and conclusions which structure the remaining chapters.

CITIES OF SAND

Washed up on the world's beaches, found upon vast deserts, drifting along rivers and buried beneath the earth, sand can be found in a variety of forms. Formed over thousands of years through erosion processes, sand is defined as loose grains of any hard material exhibiting a diameter between 2 and 0.0625 millimetres (Beiser, 2018:6). This means that sand is less a specific kind of material and more of a scale. The most abundant and useful of all sand grains on Earth are quartz, most of which are formed through erosion processes. Rain, wind, ice and life etch away at rocks and mountains, removing grains from exposed materials, which are then washed by rains downhill to rivers and beaches. Over hundreds of years, rivers overflow and their courses move, leaving in their absence large deposits of sand (ibid, 7). Over the course of millions of years, sands are likely buried beneath layers of sediment, 'uplifted into new mountains, then eroded and transported again' (ibid, 7). As geologist Raymond Siever writes, 'sand grains have no souls, but they are reincarnated' (Siever, 1998:55, quoted in Beiser, 2018:7).

Constituting roads, buildings, fracking technologies, computer chips, glass and land itself, this grainy material is at 'the core of our daily lives' (Beiser, 2018:2). This ubiquity has generated global demand, with sand and gravel constituting the largest volume of solid material extracted worldwide (UNEP, 2014). The UNEP estimate that the world consumes 40 billion tonnes of aggregates a year – double the yearly volume of sediment carried by the world's rivers.⁵ This makes humankind 'the largest of the planet's transforming agents with respect to aggregates' (ibid. 2). Current estimates suggest we are consuming almost twice as much sand and gravel as we were a decade ago, a demand largely attributed to the growth of cities. Indeed, in the 'new urban worlds' of the South-East (Simone and Pieterse, 2017), sand and gravel constitute the bulk of an expanding concrete fabric, a consumption pattern set to rise as the world's cities continue to grow.

⁵ The difference between sand and gravel is a matter of scale, with gravel pieces marginally larger than sand. Together, sand and gravels used in construction materials are called aggregates.



Image 3 - Window onto the sandpit.

Thus, sand is a central material to our lives. As a 'natural resource', demand for sand reflects the outcome of 'the different – and potentially conflicting – ways in which societies appraise the utility of the bio-physical world' (Bridge, 2009a:261). Yet, this appraisal is not static. Rather, the meanings and value we attach to the non-human world shift over time and space according to culture, technology and the limits of the environment itself. In this way, 'resources are not: they become' (Zimmerman, 1933). In Beiser's (2018) account of sand and civilization, sand's history bespeaks an uneasy rise to prominence. This history begins with a recognition that sand has been used by ancient peoples as a construction material since at least 7000 BCE, mixing grains with mud to constitute crude bricks (ibid, 31). This story shifts to a tale of concrete – of which sand makes up a significant element. Beiser recalls how 2000 years ago, the Mayans (who inhabited a region of Central America), constructed crude concrete beams, while the Greeks made use of cement mortars. Yet, it was the Romans who were the 'most enthusiastic and technically sophisticated users of concrete in the ancient world' (ibid, 31). This material was used throughout the Roman Empire, constituting houses, shops, bridges, a broad set of infrastructural components and elements of the Colosseum itself. However, 'like so much other knowledge the Romans had accumulated...the science and technology of concrete faded from memory as the empire slowly crumbled over the centuries that followed' and it was to be more than a thousand years after the Romans stopped using concrete before another concrete structure was built (ibid).

From here, despite the fact that concrete remained, for the most part a marginal material, Beiser (2018) accounts for the concrete experiments that spanned Europe and the US in the 18th and 19th centuries. However, things shifted gear following concrete's growing distinction in San Francisco, where the concrete buildings and foundations that stood the test of the 1906 earthquake and subsequent fire, placed concrete firmly in the limelight (ibid). Following a 'public relations battle', the desperate need to begin reconstructing the city following the devastation of the quake 'gave impetus to concrete's case' (ibid, 40). In the early part of the twentieth century, as the US' population expanded and cities grew at unprecedented rates, more and more of these unfolding worlds were made from concrete. And, as Bieser writes, 'the more concrete America used, the more sand it needed. Grains were hauled up in quantities never remotely seen before. In 1902, according to the US Geological Survey, the United States produced 452,000 metric tons of construction sand and gravel. Just seven years later, that amount had grown more than a hundredfold, to nearly 50 million tons' (ibid, 43). Yet, this was quantity was eclipsed by New York City's highways and skyscrapers, which consumed more than 200 million tons of sand – most of which was unearthed from Long Island, which today remains an important source of construction material for the city. Thus, concrete built America's great cities, the roads that connected them and the dams that supplied them with energy. And it was sand that constituted the underlying material of this changing landscape.



Image 4 - Building blocks.

The use of concrete is no longer geographically contained to Europe and the US. As Beiser contends, 'the building methods and materials that a hundred years ago were mostly confined to wealthy Western nations have in the past thirty years spread to virtually every country. This epochal shift is what lies behind the sand crisis' (ibid, 217). Indeed, Beiser fast-forwards to contemporary Shanghai. Here, the construction boom has mobilised sand on an unprecedented scale, most of which has been dredged from the Yangtze River. However, following the ban on sand mining from the Yangtze in 2000, Poyang Lake has now become the source of this desired material. The lake now provides 236 million cubic metres of construction sand annually; making it the world's largest sand mine. Building dams, roads, airports and 'ghost towns,' as a nation, China is now the world's largest concrete consumer and the planet's 'most voracious consumer of sand in human history' (ibid, 220). Harvey cites a similar set of statistics in his reading of contemporary capitalism. Here, in an effort to absorb surplus capital and prevent economic depression and a devaluation of capital, contemporary capitalism is marked by a tendency to shift capital into the secondary circuit of the economy – or that of the built environment. This process, which he denotes as the 'spatial fix', is behind the incessant concretisation of the world, which he reads as an absorption of over-accumulated capital. He writes that, 'between 2011 and 2013, China consumed 6,500 million tons of cement. In two years, the Chinese consumed nearly 45 per cent more cement than the United States had consumed in the whole preceding century' (2017:178). Harvey links this huge investment in the built environment to a quest to absorb surplus labour and capital which had been made redundant as a result of the 2008 financial crisis. The contraction of the US's consumer market, which formed the backbone of China's export economy, prompted a colossal state drive to build infrastructure, mega-projects and whole new cities. In this way, China absorbed 17 million people back into the labour market in just one year and consumed concrete on a huge scale. Fundamental to this process was the unearthing of millions of grains of sand. In this understanding then, our relationship with sand – its unearthing and material transformation into concrete worlds – is an integral component of the reproduction of capitalism.

Thus, in many ways, our urban moment depends on sand – as does the pace of contemporary urbanisation. Beiser argues 'there's no way cities could grow this fast without sand, in the form of concrete' (ibid, 219). This has brought material gains, he continues. Housing, schools, hospitals, concrete floors, and dams, have improved the livelihoods and health prospects of millions of individuals across the planet. It is 'an almost supernaturally cheap, easy way to quickly create relatively sturdy, sanitary housing for huge numbers of people' (ibid, 219). Yet, this has come at a huge cost. The environmental impacts of extracting sand are reflected in growing concerns in popular media and policy circles. Drawing from cases across the planet, the 2013 documentary 'Sand Wars' exposed the violent political economy and environmental devastation of the 'new gold rush,' while

news items draw attention to the local specificity of sand extraction dynamics.⁶ Reports of sand 'mafias' and ecological destruction in India continue to surface, where, after China, India ranks second in the world as the largest sand consumer. Like a significant majority of unearthed sand, India's sand is destined for its cities, where it will be mixed with cement to form the concrete structures of the nation's expanding urban fabric⁷. A recent short documentary, 'Lost World,' by a Cambodian filmmaker exposed Singapore's reliance on South East Asian countries for sand imports, ordained to become new land at the edges of the city: a city with a landmass that has grown by 20% in the last 40 years. Despite bans on exports from Indonesia and other nations, sand continues to reach the shores of Singapore, through both legal and illegal channels. In an emotional visual rendition, 'Lost World' tells the story of one island in Cambodia, where sand has been dredged and exported to the expanding lands of this city-state. Since 2007, the film tells us, Singapore has imported over 80 million tons of sand from Cambodia alone. As a consequence, the island has suffered ongoing mangrove destruction and depleting crab stocks, threatening the way of life for the community that have long resided there.

Beyond news items and documentary exposés, the extraction of sand has gained traction in policy circles, with the World Wildlife Fund for Nature (WWF) releasing a report on the impacts of sand mining on the world's rivers (Koehnken and Rintoul, 2018). Perhaps most significantly, the United Nations Environment Programme's (UNEP) released a landmark report in 2019, entitled *Sand and sustainability: Finding new solutions for environmental governance of global sand resources*. Following a brief report in 2014, the release of this more extensive engagement marks the coming to visibility of sand in international policy circles. As the report notes, 'sand and gravels are the unrecognised foundational material of our economies' and yet they are among the least regulated materials in the world (2019:2). The report represents the outcome of discussions at a UNEP roundtable in Geneva in 2018, where questions of extraction and sustainability were debated and future recommendations considered. The report contended that 'the scale of the challenge inherent in sand and gravels extraction makes it one of the major sustainability challenges of the 21st century' (ibid, 9), concluding that responsible consumption pathways, recycling and integrated governance were among options for a more sustainable relationship with this core material.

Sand, then, is a fundamental material to the shifting contours of how we inhabit the planet. And this remains particular to the historical moment in which we live. As Beiser writes, while 'people have used sand for millennia...only in the twentieth century, with the advent of modernity, did it become

⁶ 'He who controls the sand: the mining 'mafias' killing each other to build cities' (Beiser on theguardian.com, 2017).

⁷ 'India's Line in the Sand' (aljazeera.com, 2017).

'Inside the deadly world of India's sand mining mafia' (nationalgeographic.com, 2019).

indispensable to the Western world. In the twenty-first century, in our digital, globalized era, sand has become indispensable to almost everyone' (ibid, 25-26). In this way, the physical foundations of our contemporary moment are built on sand.

NEW GEOGRAPHIES OF SAND

Despite their significance, these stories of sand remain largely geographically limited to the historical and contemporary development of nations like the US, India and China: analyses which tend to privilege grand scales of extraction and consumption, that together may fail to reflect the unfolding realities of urban elsewhere. I argue that looking beyond these stories to consider processes of sand extraction and consumption elsewhere would serve well to expose the multiplicity of dynamics implicated in the transformation of sand into city. Meanwhile, diversifying the spaces from which we write of sand and city enables us to draw out how historical and socio-natural specificities shape the terms on which sand is brought into the remit of the city. Specifically, I argue that shifting the narrative elsewhere would contribute to the crafting of 'new geographies of theory' (Roy, 2009:820).

By 'new geographies of theory,' I refer specifically to the work of Roy who seeks to dislocate the 'EuroAmerican centre of theoretical production' and instead build theory from the South (Roy, 2009:820). However, I also situate Roy's work in a broader call and steady expansion of global urbanisms, or 'the proliferation of imaginative projects inspired by and productive of the great diversity of urban experiences' (Robinson and Roy, 2015:182). Much of this agenda has sought to decolonise the production of knowledge about cities, in ways that decentre the Eurocentric practices of urban studies (Robinson, 2006; Parnell et al., 2009; Roy, 2009; Edensor and Jayne, 2012). Indeed, related to an expansive debate about the global geography of knowledge production more broadly, it has been widely argued that knowledge produced and disseminated is highly skewed in favour of Western academic institutions, such that a particular way of thinking about the world continues to cite the European and American experience as the one and only referent (Robinson, 2006; Roy, 2009; Jazeel and McFarlane, 2010; Roy, 2011). Recognising the limits of this parochial system of knowledge production in urban studies, Roy warns that 'the limited sites at which theoretical production is currently theorised' and 'the failure of imagination and epistemology that is thus engendered' (2009:820), works to fundamentally limit our understanding of the diversity of urban processes. Roy (2009, 2015) argues that the inescapability of the locatedness of theory means we must produce 'new geographies of theory' – new conceptual articulations which dislocate the 'EuroAmerican centre of theoretical production' (2009:820). As she writes,

'...it is not enough simply to study the cities of the global South as interesting, anomalous, different, and esoteric empirical cases. Such forms of benign difference-making keep alive

the neo-orientalist tendencies that interpret Third World cities as the heart of darkness, the Other. It is argued that the centre of theory-making must move to the global South; that there has to be a recalibration of the geographies of authoritative knowledge' (2009:820).



Image 5- Purple skies at Awoshie Junction.

What might it mean to begin our analyses from a growing West African city? As Parker (2000) argues, the African city was borne as a 'distinct sociological entity and field of inquiry' as a colonial response to the changing environments of interwar urban Africa. Colonial governments feared that increasing levels of rural-urban migration would 'detrribalize' African populations and pose a threat to indirect rule. By the 1950s, under the growing rubrics of nationalism, the African city was imagined as a space of independence, modernity and a 'potential motor of development' (ibid, xx; Hess, 2000). Studies of urbanisation took precedence in the immediate pre- and post-decolonisation periods, with writers documenting processes of industrialisation and the changing faces of ethnicity and associational life in the growing towns of the continent, particularly in the Copperbelt (Mitchell, 1956; Epstein, 1958; Gluckman, 1961; Mayer, 1961; Gutkind, 1962; Powdermaker, 1962; Kuper, 1965; Mabogunje, 1968; Gutkind, 1968; Gugler, 1970). Through these analyses, new points of comparison emerged between 'the relative freedom of settlement enjoyed by migrants to West Africa's cities compared with the more rigid regimes farther south' (Hart, 1985:254).

By the 1970s, the African city was drawn into a broader Marxist-oriented analysis, here debating a specifically colonial capitalist mode of production and the notion of underdevelopment (ibid). By the 1990s, African cities became important sites of analyses for detailing the effects of structural adjustment – including the urbanisation of poverty and widespread informalisation of urban life – and managerial responses to dealing with this urban crisis (Stren, 1992). Today, a growing literature on African urban life departs from some of these existing studies in important ways. This multifaceted literature, which has been clustered as ‘African urbanism,’ seeks to explicitly disrupt the representation of African cities as spaces of crisis and/or development (Pieterse and Simone, 2013; Fredericks and Diouf, 2014; Ernstson et al., 2014; Myers, 2011). This reflects a response to a wider ‘crisis’ in the representation of contemporary African life forms, a crisis which Mbembe and Nuttall argue works to re(produce) ‘Africa as a name, as an idea, and as an object of academic and public discourse’ as something ‘apart from the world, or as a failed and incomplete example of something else’ (2004:348). Yet, Mbembe and Nuttall argue that the metropolis provides a way to ‘defamiliarize commonsense readings of Africa’ and write the worldliness – ‘or the being-in-the-world – of contemporary African life forms’ (2004:352, 347).

Work on African cities has continued to expand. Ernstson et al (2014) identify important theoretical areas shaping the production of knowledge about African urbanity, which are not ‘necessarily unique to African cities’ but have ‘particular salience and influence’ in relation to them (Ernstson et al., 2014:1567). The first relates to what they have termed as a ‘structural and subjective’ crisis, where ‘violence, informality, poverty and forced mobility tend to undermine urban security, stability and everyday predictability’ (2014: 1567). Further, a shared experience of colonialism, considerably late decolonisation and subsequent peripheral inclusion into the post-colonial world economy facilitate a collective discussion of urban political economy. Though as Simone reminds us, ‘if colonialism is to be retained as a useful concept in understanding African urban histories, it requires appreciating the different influences that were brought to bear on particular urban spaces’ (2004:19). Secondly, although structural adjustments were implemented in many places, ‘they were particularly difficult to avoid and their impact often felt more deeply in Africa’ (2014:1568). The downsizing of governments and growth of informality meant that the expansion of urban areas continued – and continues – despite lack of formal job opportunities. Relatedly, informal settlements’ ‘unregistered social networks in the built environment, livelihood strategies, social reproduction, cultural organization, or political mobilization’ (Myers, 2011:73) are seen to shape the production of urban spaces in important ways. Related to a convergence of urban life forms, Simone argues that the heterogeneity that once characterised a multiplicity of African urban forms has been eroded through structural crisis in the final decades of the twentieth century. He writes, ‘the impact of different pre-colonial forms of urbanization, colonial logic and administration, and postcolonial development on

African cities makes them heterogeneous in character. Yet in the face of global economic restructuring, the particular economic arrangements, cultural inclinations, and forms of external engagement that largely made African cities different from each other are being unravelled' (2004a:17). Finally, analyses of race, ethnicity and cultural differences shed light on the city as a space of exclusion, whether by 'white rule, colonial rule or middle class rule' (Ernstson et al., 2014:1568). Together, though not exclusive to urban space in African contexts, these facets are important points of reflection for understanding the terms on which knowledge about African cities is being produced.

These terms of engagement, though not exhaustive, remain explicit and implicit in many recent analyses of African urbanity. In this respect, authors such as De Boeck (2005, 2016), Mbembe and Nuttall (2004) Simone (2004, 2008, 2010), Diouf and Fredericks (2014), Pieterse (2008, 2010), Myers (2011, 2016) and Murray (2011) – among many others – are important reference points for thinking about urban theory in African contexts. At the same time, however, the growth of an African urbanism literature runs the risk of propagating an African exceptionalist approach to urban change (Gandy, 2006; Ernstson et al, 2014). Robinson's (2015) critique of strategic essentialisms (Roy, 2011), where theory may be grouped with reference to pre-existing geographical containers, may take particular precedence in the context of African urbanisms, where historically, 'Africa' as a sign has been rendered ontologically 'different' (Mbembe, 2001; Mbembe and Nuttall, 2004). The push to see African cities 'on their own terms' outside of Western reference points may bracket their experiences as unique, particular and different – such that their contributions to a more global urban studies remain stunted. The contributions of African urbanism as discussed are absolutely paramount to globalising urban studies, however; the terms on which these insights are extrapolated to bigger conversations is an important element in which to guard against reifying African urban life as exceptional. In this light, Gandy argues that a focus on an African city such as Lagos, 'has the potential to illuminate not just a peculiarly African experience, but also raise wider questions about the nature of modernity, urban governance and the interactions between global capital flows and the material conditions of actually existing cities in the global South' (2006:374). Indeed, I identify with Malaquais, who suggests that 'it would be significantly more productive to discuss cities more generally, with given African cities as starting points' (2006:31). In this way, we can situate the 'African city' as a 'provisional standpoint from where to begin speaking back to established norms of cities' (Edensor et al., 2014:1566) and literature on urban Africa as part of the unfolding of a more global urban studies, in which cities here and elsewhere can be imagined in a shared field of analysis. This is not, however, to detract from Accra's specific history, which forms an important premise for understanding contemporary urban life. In this vein, I set out a brief history of Accra's transition from

Ga *Majii*⁸ to a ‘variegated and contradictory metropolis’ (Quayson 2014:4) – a history from which I situate the thesis’ underlying questions.

FROM GA *MAJII* TO A ‘VARIEGATED AND CONTRADICTIONARY METROPOLIS’

In his reading of Accra, Quayson argues that the city’s ‘spatial logic’ may ‘only be understood by way of historicizing all the dimensions of its transformation from the small fishing village that it was in the mid-1600s to the buzzing city that it is today’ (Quayson, 2014: xx). While this introduction does not permit a detailed discussion of the diverse interpretations of these complex transitions, in the following section, I draw out some key facets of the city’s history in order to situate the contemporary city. Accra has traditionally been inhabited by Ga-speaking peoples, who presided across a landscape delimited by the Akuapem hills in the north – which rise from the coastal plain 15 miles from the sea – and by the Gulf of Guinea in the south (Parker, 2000). Accra falls within a region of forest-savanna separating the Central and West African rainforest blocks, or what is known as the Dahomey Gap (Demenou et al, 2016). This landscape of ‘open grasslands and thickets’ stretches from Accra to Badagry, Nigeria, and shapes Accra’s specific landscape as one marked primarily by aridity (Parker, 2000). In a climate where drought is not uncommon, the Gas were unable to grow tree crops, like oil palm and cocoa, which, together with gold, had brought considerable wealth to neighbouring regions (ibid). Instead, the high salinity of the region’s coastal lagoons gave rise to a burgeoning salt trade, while their strategic geographical position between the hinterland kingdoms of the Akan and European maritime states facilitated the Ga’s role as ‘indispensable middlemen’ (Quayson, 2014:39).



Image 6 - City lights.

⁸ *Majii* is translated as towns in Ga.

Town (<i>Man</i>)	Kinka (Dutch Accra; after 1868, Ussher Town)				Nleshi (English Accra or James Town)			Osu (Danish Accra to 1850, or Christiansborg)			
Quarter (Akutso)	Abola (Akutso of Ga Mantse)	Asere	Gbese	Otublohum	Alata	Sempe	Akanmaji	Kinkawe (Akutso of Osu Mantse)	Asante Blohum (Akutso of Osu Mankralo)	Alata	Anecho*
Mantsemei	<p>Taki Kome c.1826-1856</p> <p>Ofori Kakpo 1856-1858</p> <p>Yaote 1859-1862</p> <p>Taki Tawia 1862-1902</p> <p>Taki Obili 1904-destooled 1919</p> <p>Taki Yaoboi 1919-destooled 1929</p> <p>Taki Obili reinstated 1932- destooled 1944</p>	<p>Teeiko Ansa c.1860-c.1869</p> <p>Akrama c.1869-1896.</p> <p>Nii Boi a.k.a. D.P. Hammond a.k.a. Teiko Akotia II 1902-1922</p> <p>Ayi Ansa (stool caretaker 1922-1930; formally enstooled 1930 as Nii Teiko Ansa II)</p>	<p>Ayite-Ajin c.1859-c.1880</p> <p>Nii Ama c.1880-c.1892</p> <p>Okaija 1892-1910</p> <p>Ayi Bonte 1911-?</p>	<p>Amu Nakwa c.1859-c.1894</p> <p>Amponsa c.1902-1930</p>	<p>Kojo Ababio III c.1844-c.1871.</p> <p>Kofi Oku a.k.a. Edward Solomon 1871-1885.</p> <p>George Francis Cleland (regent 1882-1887)</p> <p>Kojo Ababio IV 1892-1938</p>	<p>Allotei Obuo c.1870-1876</p> <p>Allotei 1891-1895</p> <p>Anege Akwei 1906-1937</p>	<p>James Henry Badu a.k.a. Badu Ablotsrikente (stool caretaker c.1858-1894)</p> <p>Ayikai II (Jacob Vanderpuye) 1914 – stood down 1925</p>	<p>Frederik Noi Dowuona 1854-1866</p> <p>Naku c.1867-c.1883</p> <p>Gottfried Alema Dowuona 1887-1897</p> <p>Noi Ababio 1897 – destooled 1914</p> <p>William Notei Dowuona 1916-1931</p>	<p>Tete Wuruku c.1855-c.1878</p> <p>Yeboa Kwamli 1880-1912</p> <p>Ako Notei III 1917-c.1928.</p>		

Table 1 - 'Accra: Political Structure and Mantsemei, 1860s-1920s' (Parker, 2000:15).

*** Note: While the Alata and Anecho quarters of Osu do not appear to have had Mantsemei as leaders in the precolonial and early colonial periods, it is not being suggested that the present-day Mantsemei have not been elected in accordance with Ga custom' (ibid).*

Oral tradition maintains that, in various stages, the Ga-Dangme peoples arrived in the Accra plains from the east in about the thirteenth century onwards, where they settled among existing groups known as *kpeshi* (Quayson, 2014; Parker, 2000). There is limited evidence to confirm external origin and as Parker observes, ‘the “arrival” of the Ga may be interpreted not as a literal migration but as their gradual rise to demographic, linguistic, and political ascendancy over neighboring Guang-speaking peoples’ (ibid, 8). General accounts suggest that the Gas ‘appeared like a mass of ants from the eastern horizon,’ whereby, the ‘ant image accounts for the Akan name Nkrang (ants) by which they are referred to this day’ (Quayson, 2014:38). The Ga initially settled in the hills, in the northern part of the Accra plains, and it was here that the state of Great Accra – as known by the Europeans – was formed. Oral tradition narrates a generalised struggle for control over gold and wealth in this region, a conflict which in turn founded the Ga state on Ayawaso Hill – in today’s northern Accra – under King Ayite in the latter part of the sixteenth century (ibid). Under King Ayite, the Ga state ‘was one of the most populous and wealthy commercial centers on the seventeenth-century Gold Coast, the capital of a centralized state that established a considerable degree of political and economic ascendancy over the Accra plains’ (ibid, 9). Here, ‘salt, preserved fish, and European trade goods from the Ga coastal outposts were exchanged for gold and ivory from the north, while slaves moved in both directions’ (ibid).

By the mid to late 17th century, three European forts were established at the coast, which together, would form the backbone of future urban growth in Accra. The Dutch built Fort Crevecoeur in 1649 (later renamed as Ussher Fort and known as Kinka); the Danes constructed Fort Christiansborg at Osu in 1661 (which would later become Jamestown and known locally as Nleshie); and the English built James Fort in 1672-73. Following a military overthrow of the Ga state by the Akan Akwamu in 1677-1680, many Ga sought refuge at the coastal European forts. Here, Ga society was reconstructed around the forts and structured therein by quarters, or *akutsei* (sing. *akutso*) (see table 1). Densifying existing settlements on the coast, Ga Mashie, Osu, La, Nunga, Tema and Kpone emerged as the major towns, or *manjii* (singular, *man*). These towns, comprised of ‘a web of agnatic kinship groups comprising of clans, extended families and nuclear families which are linked together through intermarriage’, formed the ‘political units’ of the Ga state (Quayson, 2014:38). Crucially, ‘[t]hese kinship groups evolve[d] with the changing economic and socio-cultural developments of the Ga society which has both rural and urban social settings’ (ibid, 38). This reconstitution was not without friction, but rather the ‘formation of the *akutsei* was a result of both conflict and accommodation: political disputes that led to the division of lineage and factional groups, and the incorporation of a diverse range of free and unfree settlers’ (Parker, 2000: 12). I provide a more in-depth discussion of these governing structures in relation to land in chapter four. Here, however, Parker’s reading of these changes and their legacy is worth quoting at length:

‘The suzerainty of Akan overlords, the division of Accra into European zones of influence, and the ethnically diverse and autonomous nature of the *majii* and their constituent quarters combined to prevent the re-emergence of a centralized Ga polity following the Akwamu conquest. As a subject people occupying a lucrative but politically hazardous middleman niche, the Ga developed an eclectic urban culture characterized by the borrowing of institutions and motifs from both Akan and European models. This renowned eclecticism continued to shape the historical action that often turned on the questions...What constituted Ga authenticity? Who governed the precolonial town?’ (Parker, 2000, 17).

These questions would shape the unfolding of a colonial politics of indirect rule, through which the British would seek to govern via native institutions. As elsewhere, in Accra these structures were highly contested and served to challenge the British attempt to govern the city and colony more broadly.

The rise of British power, however, was preceded by a succession of Akan rulers. The Akwamu rule was succeeded by the Akyem kingdoms in 1730, which, in turn, was subsequently defeated by the Asante kingdom in 1742. The Asante kingdom would remain in power until the mid-1820s (ibid). During this period, Accra’s ‘urban identity was based on its function as a site of exchange, transaction, and power,’ and therein, ‘town notables...fashioned a lucrative middleman role in the exchange networks of the Gold Coast and its forest hinterland’ (ibid, 36). Unhappy with Asante rule, Ga leaders joined the British-led alliance of coastal forces against the Asante kingdom and by 1826, the Asante were defeated, setting in motion the beginning of the rise of British dominance. The Anglo-Danish Treaty of 1850 and the Anglo-Dutch Treaty of 1874 transferred all coastline forts and castles to the British and in 1877 Accra would become the new capital of the unified British administration, which would later include the Northern Territories, the Ashanti region and a part of Togoland (Quayson, 2014). However, as Parker (2000:35) observes, ‘[t]he incorporation of Accra into a framework of colonial rule was a drawn-out, negotiated affair, which ebbed and flowed throughout the nineteenth century.’

In the early twentieth century, Accra’s population doubled, from less than 19,000 in 1911 to more than 38,000 in 1921 (Parker, 2000). The expansion of cocoa exports contributed to the city’s transformation, which morphed into a colonial port city, characterised by ‘port and railway infrastructure, warehouse facilities, banks, and expatriate trading enterprises’ (ibid, 195). This economic expansion called for more labour and the city attracted a large number migrants from the North, prompting the making of migrant settlements in Tudu and Makola (Quayson, 2014).

Meanwhile, the colonial administration constructed racially segregated housing for European civil servants in Victoriaborg and later in Ridge, Ringway Estates, Cantonments and Airport Residential Area. These enclaves, propelled by the imperatives of health and sanitation, remained exclusive until the 1940s and while no longer racially segregated, this 'spatial economy of privilege' remains largely intact today (ibid, 81). In this regime of urban expansion, the economic and political values of urban and suburban land increased significantly, generating a 'kaleidoscope of legal struggles' (Parker, 2000:198). Indeed, 'the expanding city was hotly contested from the outset,' the struggles of which I discuss in chapter four (ibid).

The end of World War Two gave way to considerably more holistic urban planning, marked by the enactment of the Gold Coast Town and Country Ordinance in 1945 (Quayson, 2014). An urban masterplan was commissioned in 1954 and submitted in 1958 to the then newly independent government. Entitled '*Accra: A Plan for the Town*,' the plan sought to implement a modernist concept of the city (ibid, 82). Kwame Nkrumah's independent government implemented this 'colonial blueprint of town planning almost wholesale, only adding a strong nationalist emphasis of monuments and other development projects to reflect new priorities' (ibid, 66). Indeed, this era of Accra was marked more broadly by an 'architecture of independence' (Herz, 2015), including statues, monuments, Black Star Square and the State House. These architectural interventions sought to articulate the notion of a newly unified nation and a sense of Pan-African identity (Hess, 2000). In this era, high rates of rural to urban migration fuelled population growth and the geographical expansion of the city, while Accra's CBD was both de-Europeanized and largely nationalized (Grant, 2009). Broadly speaking, nationalist economic policies shaped the making of Accra in this period, with governments prioritising the city as a growth pole for the nation (Grant, 2009). Governments centred infrastructural development as part of national planning and 'aimed for a Ghanaization of industries' (ibid, 22). Quayson maintains that from independence onwards, 'it is hard to argue against the view that the city suffered a decades-long planning stagnation until after the implementation of the IMF-instigated policies of the mid to late 1980s' (2014:66-67).



Image 7 - Passing figures at Awoshie Junction.

From here, writers have pointed to the significant spatial implications of structural adjustment and neoliberalism more broadly as they have played out in Accra from the 1980s onwards (Grant, 2009; Yeboah, 2000). Grant (2009) points to the spatial arrangements of Accra as a ‘globalizing city,’ including foreign corporate space, global residential spaces and gated communities, land sales, remittances and building booms, alongside slums which remain prevalent across the city. In addition, Yeboah (2000) details the expansion of peri-urban Accra, marked by low-density residential sprawl into the north and west rural spaces of the Greater Accra Region. This spatial configuration, he contends, is the manifestation of a multitude of factors including: trade liberalisation and the increased importation of vehicles and building materials; expanded cement production; foreign exchange liberalisation and increased remittance sending; investment in housing; growth of the middle classes and expatriates; and increasing desires to own a detached dwelling (ibid). Writing at the turn of the century, he notes that, while varying in size, these dwellings are uniformly built with cement blocks, and while a number of private development estate companies are increasing, the majority of these homes are self-built (ibid).

In a more recent rendition of a transnational Accra, Quayson turns to the city’s Oxford Street – a commercial road in Osu – as a ‘spatial imprint for the forces of globalization’ (2014:67). Quayson situates the street’s international banks, high-end shops and fast-food restaurants within the remit of economic liberalisation, arguing that the street may be understood as the ‘explicit materialization of the dream of prosperity invoked in the prayers of the evangelical churches’ – which have also

mushroomed across the city since the 1980s (2014:154). More broadly, Quayson calls Accra a 'variegated and contradictory metropolis,' which conveys the core facets of this shifting urban region today. Having expanded from a population of just under 3 million in 2000, Greater Accra's population is presently estimated at 4 million inhabitants, stretching unevenly over an area in excess of 3500 square kilometres. Today, the city is both consolidating in emerging centres and expanding at its edges, giving rise to a variegated set of urban forms which bespeak Parker's descriptions of pre-colonial Accra as exhibiting a 'renowned eclecticism' (2000:17). In downtown Accra, new hotels like the *Kempinski* cater to an internationally mobile elite, while the recent Stanbic Heights development outside of the historical CBD projects an image of the city as deeply embedded in a new global economy of Information Technologies (IT) and finance. These high-end developments are mirrored in new residential communities at the Villagio Towers, among others, as well as satellite cities like *Apolonia*. High-end commercial zones, eateries and malls cater to both a national and international elite, as well as middle and lower-middle income groups.

Yet, large and extremely diverse informal communities have not disappeared, including communities in Old Fadama, Ashiaman and Nima, each with their own complex histories of inhabitation and political potential. At the same time, the city continues to expand at its edges, giving rise to ever shifting urban frontiers. The movements of these creeping frontiers are propelled largely by the conversion of agricultural lands into residential development, led by individuals, families and/or estate developers (Gough and Yankson, 2011). Thus, developing alongside both old village centres and new highways, a diverse and extremely contested peri-urban space surrounds an ever-morphing city, hosting both upscale residences and lower-income self-built housing (Doan and Oduro, 2012; Grant, 2009; Stow et al, 2016; Boamah and Walker, 2016; Yeboah, 2008; Barry and Danso, 2014).

Like all cities, Accra today is the product of its accumulated histories. These span the pre-colonial, colonial and post-colonial eras, but its urban trajectory cannot be contained within these discrete categories (Parker, 2000). Writing of Accra's early colonial history, Parker suggests that Accra 'was at once the headquarters of the new colonial order and the epicenter of an older Ga world' (ibid, xix). To rephrase Parker through both Quayson and Grant, I suggest that contemporary Accra may be understood as at once a variegated and contradictory, globalizing metropolis *and* the 'epicenter of an older Ga world.' The significance of writing sand from Accra lies partly in this history, which, as will become evident throughout the thesis, continues to shape the present unfolding of the city. I suggest that writing from Accra serves to expose the importance of reading contemporary urbanisation processes through place-specific historical trajectories, acting as a timely reminder that the 'new urban worlds' of the global south-east (Simone and Pieterse, 2017) are not taking form upon terrains of *tabula rasa*, but are rather the outcome of existing landscapes re-made.



Image 8 - 'New urban worlds.'

Meanwhile, Accra's geographical location on a continent often positioned as the world's most rapidly urbanising region (Saghir and Santoro, 2018) marks it as an important place from which to analyse urban processes and position these in relation to global urban conditions more broadly. Indeed, writing from Accra offers potential points of comparison with cities elsewhere (Robinson, 2011, 2014). While Accra's *specific* history remains unique, the spatial imprint of its colonial past and the legacies of colonial power serve as potential comparative points with urbanising regions of the postcolonial world. Equally, while offering an entry point into the sub-Saharan African region, Accra's embeddedness in the world's fastest growing economy¹² (a product of its recent exploitation of oil reserves), may set it apart from other countries in the region in important ways, perhaps offering points of alignment with rapidly expanding resource rich economies beyond the African continent. Thus, I argue that writing the story of sand from Accra offers ways of thinking the contemporary urban moment through historical and place-specific modes of analysis, meanwhile crafting potential 'comparative gestures' towards urban elsewheres (Robinson, 2011).

¹² 'Ghana is the Star in MIF's 2019 Economic Growth Forecast' (Bloomberg, 2019).

SAND AS THE CITY'S CONSTITUTIVE OUTSIDE

With postcolonial calls in mind, I suggest it also remains important to take seriously the urban's constitutive outsides. Thinking with the urban's constitutive outside[s] has recently gained considerable traction, largely in response to and through engagement with Brenner and Schmid's (2015) 'new epistemology of the urban,' diagnosed as 'planetary urbanisation.' Here, through recourse to landscapes of 'extended urbanization' that span the planet, supplying capitalist urbanisation with the socio-metabolic and economic inputs to sustain urban expansion and densification, Brenner and Schmid contend that 'there is no longer any outside to the urban world' (2015:168). In response, a host of postcolonial, feminist, critical race and queer critiques have emerged, contesting this totalising 'way of seeing' (Cosgrove, 1985) as one that fundamentally limits our capacity to engage with the multiplicity of theories, struggles, experiences and subjectivities generated by and through cities (Goonewardena, 2018; Derickson, 2015; Peake, 2016; Oswin, 2018; Ruddick et al, 2018). In doing so, observers have written against the total urbanisation of everything, instead bringing to the fore the urban's 'multiple constitutive outsides' (Reddy, 2018:529), including the outsides of urban studies itself (Jazeel, 2018).



Image 9 - Urban edges.

For Roy, there are multiple constitutive outsides to the urban, urging us to remain attuned to the 'always incomplete processes of becoming urban' (2016:813). Here, she makes two additional points regarding the urban's constitutive outsides: the urban as a historical category that is both 'old and

incomplete' and the urban as a governmental category (ibid, 817). Indeed, she contends that 'even if we are to concede the urbanization of everything, everywhere, we have to analytically and empirically explain the processes through which the urban is made, lived, and contested – as a circuit of capital accumulation, as a governmental category, as a historical conjuncture' (ibid, 816). In her analysis of Kolkata, she locates the rural as one such constitutive outside, elevating the entanglement of both urban *and* agrarian questions to the forefront of critical engagement. In doing so, she exposes the historically rooted forms of urbanisation currently unfolding and the emerging forms of governance that designate populations as urban.

Critically, for Roy, a methodological engagement with urban constitutive outsides translates as practices of feminist and post-structuralist deconstruction, which function to withhold the urban as a contingent category. Following Mouffe (2000: 12-13), who in turn follows Derrida, the constitutive outside can be understood as,

'not a content which would be asserted/negated by another content which would just be its dialectical opposite – which would be the case if we were simply saying that there is no “us” without a “them” – but a content which, by showing the radical undecidability of the tension of its constitution, makes its very positivity a function of the symbol of something exceeding it: the possibility/impossibility of positivity of such. In this case, antagonism is irreducible to a simple process of dialectical reversal: the “term” is not the constitutive opposite of a concrete “us”, but the symbol of what makes any “us” impossible. (Mouffe, 2000, p. 12-13)' (ibid, 821).

Thus, the constitutive outside 'is not a dialectical opposite but rather a condition of emergence, an outside that by being inside creates 'radical undecidability'' (Roy, 2011:224). It is to this end that Peake asks, 'where is the place within planetary urbanization for a consideration of the undecidability of the urban?' (2016:223). By contending that this undecidability remains 'a function of the symbol of something exceeding the subject,' she asks us to consider 'what exceeds the urban when the urban is now so reassuredly the planetary condition?' In this way, calls to illuminate the 'undecidable' relationship between the city and its outsides push against temptations to reduce all earthly relationships to processes bound by the urban age, and in the process, draw upon a broader literature beyond urban studies itself. Together, I read these interventions as a call to situate our conceptual grasp of cities and their manifold relationships as spatially-bound, politically-limited and historically-specific, conjunctures of knowledge.

I suggest that these outsides have much to offer in writing against the trope of inevitability which has gained traction in describing present urban processes, both in and beyond academia. While the planet may indeed be bearing witness to unprecedented scales of urbanisation – particularly across the African continent (UN Habitat, 2016) – it is critical that our understandings of these processes are not clouded by regimes of inevitability and that we rather remain attune to the specific ways in which urban worlds are taking shape. This means we must value vantage points that expose how and through what formations urban worlds are both remaking and unmaking existing landscapes, exposing, by virtue, both the outsides of the urban and the ‘always incompleteness’ of urbanisation processes. I argue that positioning sand as an undecidable, constitutive outside to the city serves well to write against the all-encompassing inevitability of urbanisation and instead asks us to think about the ways and terms through which sand *becomes* the city. Thus, the foundational question that this thesis asks is:

WHAT ARE THE PROCESSES THROUGH WHICH SAND IS URBANISED IN ACCRA?

As I detail in greater depth in the proceeding chapter, my fieldwork began at a beauty salon in Awoshie Junction – a popular grooming place on a busy interchange to the Western edge of Accra. It was here that I first encountered the material of sand, as it was brought into the city from Accra’s edges and sold at a designated station on the opposite side of the road to the beauty salon at which I had located myself. Following a series of introductions to the truck drivers responsible for this laborious work of collecting and delivering sand across the city – or ‘tippers’ as they were known – I was invited to join the drivers as they moved from the station to sand extraction zones and eventually, spend extended periods of time at these zones themselves. As time progressed, the research morphed from the study of beauty spaces, to the study of a junction, to the study of a material, however, each of these stages of the fieldwork coalesced to inform a wider engagement with the city. In this way, Awoshie Junction was an important interface between the stages of my research but also remained a significant space from which I would learn of the city and its inhabitants. Indeed, it was often through the residents of Awoshie Junction that I hoped to make sense of the shifting landscapes of the city and the ways in which inhabitants engaged with the materiality of sand.

As I moved through the city with the tippers, grounded myself at the sand mines and spent prolonged periods of time with residents at Awoshie Junction, I began to build a more specific insight into the socio-natural politics of extraction, the multiplicity of labours related to sand’s unearthing and movement, as well as the ways in which sand became implicated in both environmental and political struggles. These insights on the truck, in the pit and at the junction also evolved as I met with various state officials at the local and central government, including commissions specific to mining and the

environment. Thus, as the research developed, a more specific set of questions emerged in support of the underlying question governing the thesis:

- i. HOW AND TO WHAT EFFECT IS SAND EXTRACTED?*
- ii. WHAT LABOURS ARE IMPLICATED IN THE ECONOMY OF SAND?*
- iii. IN WHAT WAYS DOES SAND INTERSECT WITH THE CITY'S ENVIRONMENT, ITS INHABITANTS AND THE STATE?*

In the following section, I provide an outline of the thesis and its core findings.

THESIS STRUCTURE

CHAPTER TWO: SHIFTING WITH THE SANDS: METHODS, IDEAS, PEOPLE AND THINGS

Chapter two presents a story of the how the research process unfolded, charting the shift from an initial focus on beauty work and salons, to a specific junction in one of Accra's suburbs, to the materiality of sand more broadly. The chapter sets out the coming together of both methodological decisions and chance encounters which together formed the energy undergirding the progression of the research. In extended detail, I introduce the key spaces and interlocutors that allowed the research to move in the direction it did, positioning myself, as best as possible, within this unfolding endeavour. I describe the kinds of methods deployed, including participant observation, interviews and photography, and how these were used in different ways for diverse purposes. Throughout the chapter, I also introduce a series of smaller questions, which through amalgamation, I re-work into the sub-questions that formed those I outlined above. The chapter also presents key ethical questions regarding relationships and representation which I deal with more thoroughly in the concluding chapter. Together, these facets of the chapter seek to provide the reader with the occasion to engage with the ways in which this research unfolded.

CHAPTER THREE: UNEARTHING A CITY OF SAND: LITERATURE REVIEW

Chapter three seeks to build a theoretical position through which to situate the urbanisation of sand. Moving through several bodies of literature and articulating possibilities and limits within this work, I seek to build a productive conversation between sand and the city, locating this theoretical manoeuvre as the *unearthing of a city of sand*. Specifically, the chapter begins by detailing the historical and contemporary dimensions pertaining to the demand for sand in Accra, positioning this context as an important starting point for understanding the driving forces underlying the urbanisation of sand. The chapter then turns to a discussion of Yusoff and Clark's (2017) significant observations regarding social sciences' limited engagement with geological processes. With their

calls for geosocial analyses in mind, I discuss the historical and contemporary facets of Ghana's geosocial dimensions, positioning the urbanisation of sand as an opportunity to extend this analysis beyond minerals which have tended to reign supreme in the nation's history.

From here, I turn to three further sets of literature through which I situate the urbanisation of sand: extractive industries, extractive urbanism and urban political ecology (UPE), arguing that sand fits uneasily within and across this work. Meanwhile, I contend that an analysis of the urbanisation of sand presents significant opportunities to expand the theoretical dimensions of these existing contributions. More specifically, I argue that an analysis of sand's urbanisation extends our reading of extractive practices beyond prized materials, like oil and gold, serving to elucidate domestic geographies of extraction and consumption that undergird contemporary urban processes across the planet. Additionally, I argue that an analysis of the urbanisation of sand offers significant opportunity to strengthen an understanding of the relationships between urbanisation and extraction as co-constitutive processes, in turn rendering visible the fundamental material links between resources and cities. Finally, I suggest that detailing the ways in which sand is urbanised serves to extend theoretical engagement with the city as a deeply political socio-natural process, through the lens of an integral, yet theoretically marginal material. Through doing so, we are able to further detail the fundamental links between nature and the built environment - meanwhile responding to calls to provincialise UPE beyond the theoretical and geographical limits of classical interventions (Lawhon et al, 2014). In addition to the pressing need to shift the coordinates from locations which have tended to dominate the sand story and the opportunity to extend a geosocial analysis into present-day Accra, beyond the classically prized minerals, I argue that the urbanisation of sand in Accra presents an important analytical occasion to expand our understanding of both urbanisation and extractive processes in meaningful ways. Thus, I argue that by stretching the contours of this existing work, as well as building links across this literature, an analysis of the urbanisation of sand has much to offer in expanding an understanding of the contemporary unfolding of both extractive and urban worlds across the planet.

CHAPTER FOUR: THE SHIFTING SANDPIT: EXTRACTING SAND IN AND FOR A POSTCOLONIAL CITY

Chapter four is the first of three empirical chapters and deals most explicitly with sub-question (i). This chapter details the socio-natural politics through which sand is extracted from the city's shifting edges. The chapter begins with an ethnographic narrative pertaining to the shifting historical geographies of both sandpit and city. This historico-geographical narrative emerged through moving with the tippers and was subsequently paralleled through conversations at multiple government bodies and across the field sites more broadly. I argue that this narrative presents a powerful imagery

of the city as a socionatural process, aligned explicitly with work in UPE. The chapter supplements this broader shifting geography with a detailed ‘geosocial’ (Yusoff and Clark, 2017) analysis of the shifting sandpit: how sand is extracted from it and how it subsequently moves across space. Through a geosocial analysis, the chapter extends the socio-natural reading of the city, exposing the ‘deep time of the city’s socionatural evolution’ (Mendelsohn, 2018: 456). I show that the land from which sand is extracted is geologically uneven, ecologically fluxing and implicated in a postcolonial politics of disputed ownership and contested access – arguing that these underlying facets of land tend to govern the extraction process. However, I contend that the mobile nature of the sandpit demands that the sandpit is renegotiated, or indeed remade as it moves across the shifting contours of the city’s edges. It is to this end that I situate the shifting sandpit as an ‘aperture, an opening, a possibility’ – or indeed, its own kind of postcolonial hole (De Boeck and Baloji, 2017:151).

CHAPTER FIVE: LABOURS OF SAND: RETHINKING EXTRACTIVE ECONOMIES

This chapter engages more specifically with sub-question (ii), thinking with the broad set of labours that surround sand, beyond the immediate labours of extraction at sand mines. Set within the context of the limited availability of jobs in Accra, the chapter details the ways in which value is extracted from the shifting sandpit and indeed, sand itself, as it moves from sandpit to city, exposing the multiple means through which sand becomes a source of livelihood for a broader set of individuals beyond the sand contractors and tippers. By considering these questions, the chapter thinks about how value is made in and through the city, how economies are spatialised and how work in contemporary Accra is both practiced and experienced. I argue that the many labours embedded in the expanded sand economy speak to the difficulties of securing work in Accra and its peripheries. Indeed, I suggest this economy is a testament to the sheer energy, improvisation and ingenuity demanded to make a living in the city. However, I also argue that these practices enable us to extend the meaning of extraction beyond its more obvious deployment in the context of sand mining, to consider extraction as a broader set of strategies for claiming value from otherwise exclusive transactions. I argue that these extractive economies may offer us significant analytical purchase in understanding contemporary livelihoods in the city, as well as opening-up a political aesthetic of rights and distribution in future urban worlds (Ferguson, 2015). Indeed, by thinking through extractive practices as a broader kind of political demand, I suggest we are drawn to consider the possibilities of emerging distributive claims in economies that centre and span urban regions. In this light, I contend that if cities continue to expand with limited opportunities for reasonable working lives, perhaps the city needs to be rethought as a place of extraction – as a place for *claiming value* and *demanding income*.

CHAPTER SIX: THE ANXIOUS ANTE-LIVES OF URBAN FORM: SAND, SUSTAINABILITY AND SECURITY

In this chapter, I think more closely about sub-question (iii), exploring the ways in which sand – its extraction, mobility and transformation into concrete – intersects with the lives of Accra’s inhabitants, the environment and the state. In doing so, I turn to the notion of anxiety, seeking here to draw together the multiple dynamics embedded in the urbanisation of sand in contemporary Accra. Opening with a narrative of inhabitants’ anxious moves to secure a plot of land and build a concrete home, I suggest that the urbanisation of sand may be best captured through anxiety’s double meaning: as both a longing *for* and an apprehension *of* a given process. Indeed, as sand was brought into the realm of the city – or indeed, urbanised – it gave rise to a vast set of anxieties that found themselves connected in complex constellations. Moving across spaces and scales, I argue that anxiety allows us to talk across multiple dimensions of sand’s position in Accra, opening-up a way of seeing the city that captures the uneasy transformations that undergird its material production. From concerns surrounding the future durability of concrete cities, the degradation of the environment, to the widespread loss of farmland, illegal sand winning and state attempts to govern urban peripheries, I show that sand’s urbanisation gives rise to a vast set of anxieties which together span city, nation and planet. The chapter begins with a discussion of anxiety and African cities, thinking through the contemporary and historical anxieties projected onto urban spaces across the continent. From here, I offer a brief selection of more recent academic work which departs from these readings and suggest that a rendition of the anxious city through the prism of sand may have much to offer in re-positioning the meaning of anxiety in a contemporary African city.

CHAPTER SEVEN: CONCLUSION: SHIFTING SANDS IN ACCRA

In the final chapter, I draw together the thesis’ core contributions, set in the context of reflexive discussions on the nature of research, relationships and representation. Here I reflect on my positionality in the field broadly and through the prism of race more specifically, before turning to the politics of representation and ethics therein. Through this discussion, I contend that the notion of a ‘vanishing point’ (Mouffe, 1993) is an important way of recognising the unrelenting work embedded in attempting to move towards a postcolonial research project. In this way, I suggest that the findings presented in this thesis should be read as a product of my embodied presence in the worlds I sought to write of and through. I subsequently turn to reflect on the chapters, reviewing their key conclusions and contributions more broadly. I argue that together, the chapters extend our grasp of the city as a specifically geosocial, socio-natural process, meanwhile, expanding our view of extractive industries writ large and their material relationships to urban formations more specifically.

I also argue that viewing the city through the sandy ante-lives of urban form presents a reading of Accra's landscapes through otherwise theoretically neglected urban economies and labour practices, which in turn allow us to rethink the meaning of extractive practices as political demands for an income. Finally, through a reading of anxiety grounded in the material un- and re-making of the city, the urbanisation of sand serves to write against external discourses of anxiety projected onto past, present, and future African cities. To end, I present potential directions for expanding the terms of this research, concluding with a reading of 'shifting sands' as an urban condition more broadly. I argue that positioning shifting sands as an urban condition points to both the ongoing un- and re-making of urban landscapes and the persistent presence historical traces - meanwhile rendering visible the materiality of the city and the multiplicity of power formations that animate the urban as inhabitants carve out an existence in and through it. In the end, I suggest that reading the city as a set of shifting sands offers us not only a strong grasp of a contemporary condition but also space to both unearth and indeed enliven possible urban futures, which remain always already embedded in the contours of our 'urban now' (Baloji and De Boeck, 2017).

The image has been redacted for copyright reasons.

Image 10 – Family.

SHIFTING WITH THE SANDS: METHODS, IDEAS, PEOPLE AND THINGS

'Field research is, after all, an 'art of the possible', and in cities there are many possibilities'
Pardo and Prato (2018:2)

INTRODUCTION

In the opening chapter, I introduced the materiality of sand and its relationship to historical and contemporary processes of urbanisation. I argued that there is much to gain by shifting the geographical coordinates of this narrative, which so far, remain in large part tied to the US, China and India. I suggested that Accra offers up an interesting and important site from which to build an analysis of sand's role in urbanisation processes. I ended the chapter with a question which governs the thesis, asking how a raw material such as sand, becomes the city. This chapter details the story of my research and the methodological processes which shaped how I came to centre sand in the research endeavour. The chapter provides the initial theoretical and methodological decisions, and how and why these shifted throughout the course of the year. Moreover, it provides important empirical detail about my research settings, describing the transition from research centred on a salon, to a junction, to the shifting sandpit. Through these facets, the chapter details the unravelling of my earlier research questions, providing a backdrop to the questions that would eventually govern the thesis. Thus, this chapter seeks to offer the reader an insight into the evolution of the research project and sets the scene for later ethical reflection in the thesis' conclusion.

OPERATION VANGUARD

It was Friday 9th of June 2017. The air felt heavy as one by one, sombre faces appeared on the television screen. Archbishop Palmer-Buckle made a call for national healing and vice President Mahamudu Bawumia laid a wreath. The Army followed. I was watching the televised state funeral of the late Maxwell Mahama: the 32-year old senior military officer who was brutally killed by a group of residents at Denkyira Obuasi, Central Region. Allegedly, the young captain, armed with his pistol, had been taking his morning jog and been mistaken for an armed robber. He was subsequently beaten to death by a group of inhabitants in the town. His death was widely condemned across the nation and sparked broader debates about mob justice. The captain had been stationed in the region to manage the high incidence of illegal mining in the area; particularly mining for gold. In later news items, controversies surrounding Mahama's presence in the region surfaced, including accusations

that his military unit was protecting an illegal mining company. However, these were dispelled and preparations for the unveiling of a statue in his honour were set in motion.

Mahama's stationing preceded the official launch of the security operation 'Operation Vanguard,' which became effective just months later, seeking to control illegal mining in the Ashanti, Eastern and Western regions. The Presidential initiative deployed 400 men from the Ghana Armed Forces (GAF) and the Police Service in the hopes of protecting life, property and the environment in regions under threat from illegal mining – or what was popularly known as '*galamsey*,' which simply means to 'gather and sell.' Operation Vanguard formed the latest in a long list of military operations attempting to control illegal mining across the nation. As Ellimah (2019) argues, mining companies have long relied on security agencies to protect their concessions. Owing to fears of disinvestment and political pressure, the stationing of the military in camps and 'on-call' systems ensured that mining activities were safeguarded from the threats of illegal mining (ibid). Operation Vanguard placed environmental concerns, including the pollution of water, as central to its mandate. In this way, the tragedy of Mahama's death exposed the anxieties of the nation: armed robberies and illegal mining. These were threats that circulated throughout my fieldwork, coming to periodic moments of realisation. Indeed, without yet knowing, the state funeral of the late Maxwell Mahama bore much closer resemblance to what my project would eventually become: an engagement with the unearthing of one of Ghana's natural resources.

The unrelenting rhythm of the fan above me gave way to a short silence and my eyes drifted back into the room. I was sat in the vicinity of a small hairdressing salon in Asylum Down, just south of the Ring Road which stretched across this part of central Accra. I was waiting for the arrival of a friend who I had met at the same salon more than a year previously. Cynthia¹³ had been perched on the edge of the salon steps, which hung precariously over the street corner of a small junction in the neighbourhood. Passing through, we had greeted one another and began talking. Her energetic demeanour sparked my interest and our similar ages generated discussions of our comparative lives. Are you married? Do you have children? Where are your family? I explained my purpose and she seemed interested. We spent a few days in the city. She took me to the mall, her tailor and we walked around the neighbourhood. Upon my return to the UK, we continued to keep in touch and this meeting at the salon would be the first time we had seen each other in a year. Back in the salon, I heard her voice before I saw her face. She had been raised in this neighbourhood and was constantly greeting men and women, young and old on what felt like every corner of every road. She greeted me in *Twɔ*, testing whether I had remembered the small phrases she had taught me the previous year.

¹³ Throughout the thesis, all names have been replaced with pseudonyms.

'Ete sen?' she asked. 'Me hoy3 pa medasse,'¹⁴ I replied. She laughed and we left the salon and headed to Circle, the nearby transport interchange.



Image 11 - Beauty on the wall.

As preparations for my fieldwork progressed in the UK, I expressed to Cynthia an interest in studying salons in Accra. I asked if she knew of anyone I could speak to, hoping to gain longer-term access to a salon space. She revealed that her auntie owned a small salon at Awoshie Junction – a place I had neither seen nor heard of during my short stay in Accra the year before. Cynthia had been spending time with her Auntie following a breakup with her boyfriend and was periodically helping her Auntie look after the salon, sweeping floors and washing clients' hair when asked. Here, she met Sadiq, her new boyfriend who operated a small glass cabinet stocked with modest electrical goods. Two years her senior, Sadiq was also full of life and together they were a dynamic couple who both laughed and argued day in and day out. Cynthia and I waded our way through the crowds of people, cars and goods that swelled through Circle. Marching through to the very far end of the *tro tro* station, I heard 'Awoshie, Awoshie' called out. We climbed in the vehicle and waited for the seats to fill: a sometimes long, hot and frustrating process. Eventually, the vehicle began moving and we headed towards a series of intersecting flyovers which organised traffic flows across the city. This new symphony of concrete opened earlier that year, unveiling a grey modernist architecture built by a large Brazilian conglomerate. Passing beneath the underbelly of this concrete structure, the rumble of engines and

¹⁴ Translated as 'How's it going?' 'I'm very good thank you.'

echoes of speakerphones seemed magnified. We headed west and north across the city, with a vast Accra stretched out beside us.

POSTCOLONIAL URBAN RESEARCH

This opening outlines the early stages of my fieldwork, which, over the course of a year, shifted and changed as I moved with people and things across Accra. The research began with an interest in beauty salons. This took me to Awoshie Junction and it was here, that I first encountered sand. Amongst a varied set of shops and stalls were two sand stations. The first was home to tippers and their trucks, who collected sand from the urban edges and delivered it to customers across the city. The second station hosted mounds of sand which awaited sale. As my research progressed, these stations would become important fieldwork sites and as I built relationships with those working in these stations, I would set the scene for shifting with the sands.

Yet, as aforementioned, at first, the research set out to build insight into the relationship between cities and contemporary beauty work. By beauty work, I mean the performance of services on the bodies of others, marketed as maintaining or improving a desired aesthetic appearance of the body, in exchange for a financial, or otherwise, reward. I sought to understand the ways in which beauty work is enfolded into a city's social, material and imagined landscape and the ways in which beauty work shapes particular spaces of intimacy, interaction and associational life within cities. Here also, I sought to understand the ways in which beauty work is implicated in shaping the kinds of working presents and futures people are able to imagine and play out in the city. Thus, I was interested in the capacity of salons to offer broader insights on societal shifts (Weiss, 2009) and their potential to open-up political vistas (Ossman, 2002:73). The theoretical capacity embedded in beauty work had been largely ignored in urban studies and this, I felt, underestimated the centrality of these labours and spaces in contemporary cities.

Accra was an interesting place in which to understand these processes. Here, images and practices of beauty work litter the urban landscape (Kaupinnen and Spronk, 2013). Salons vary from high-end salons in permanent structures, catering to a middle-class clientele, to smaller kiosks, as well as tables and chairs set within view of the street (Essah, 2008). The proliferation of beauty salons in the urban landscape is a relatively recent phenomenon, dating roughly from the 1980s onwards (Oda, 2005; Essah, 2008; Langevang and Gough, 2012; Kaupinnen and Spronk, 2013). These changes are linked to economic shifts in Ghana and elsewhere (ibid.) Indeed, writers have argued that structural adjustment prompted a growing informal economy, while trade liberalisation saw the importation of new products from the US and Europe, including chemicals for relaxing hair, artificial and human hair, and images and styles from around the world, which have together shaped new aspirations for

self-making. Thus, the narrative is such that the growth of individuals searching for income in the informal economy, coupled with an expanded demand for skilled labour to style hair with newly imported products, saw a growth in the number of salons and women engaged in this form of work. This context provided an interesting backdrop for me to seek answers to the questions I had posed.

The image has been redacted for copyright reasons.

The research sought to build an ethnography of beauty in Accra, exploring the contours of beauty through ‘people’s lives, actions, and beliefs within their everyday context’ (Duneier et al, 2014:1-2). This decision aligned closely with my methodological commitments to conducting, where possible, long-term research that favours in-depth engagement with individuals in and across spaces of their own. More specifically, this methodology would include methods of participant observation, interviews, archival and media work, as well as photography, in order to generate a holistic engagement with the socialities of beauty in the city.

In my readings of urban ethnography, I had been inspired by some of the classic studies in North America, like William Foote Whyte’s (1943) *Street Corner Society*, as well more contemporary ethnographies in African cities, including Sasha Newell’s (2012) *The Modernity Bluff* and Brad Weiss’ (2009) *Street Dreams and Hip Hop Barbershops*. These readings valued thick description, granular detail and an analysis that drew ethnographic specificities into a broader remit of political economy and global culture. Newell and Weiss’ analyses moved beyond the tropes of crisis and conflict to unpack the way life is lived in both Abidjan and Arusha and the things and places that give meaning to individuals in these cities. In doing so, these accounts pushed for new theoretical articulations that take account of the realities encountered through ethnographic engagement, as opposed to continually pitting findings against existing theories, made with Western cities in mind. In many ways, these ethnographies aligned with an underlying commitment to a postcolonial urban research agenda, much of which seeks to decolonise the production of knowledge about (Robinson, 2006; Parnell et al., 2009; Roy, 2009; Edensor and Jayne, 2012). Yet, despite commitments to a postcolonial

Image 12 - Salon days.

research agenda, questions remained. To what extent could a white western woman, working from a Western academy really contribute to this postcolonial call? These questions would intersect with the specificity of the research sites, which shifted as my research evolved and indeed are questions I unpack at greater length in chapter seven. Despite these concerns, the ethnographic study of beauty work in the city seemed to broadly align with calls for a postcolonial urban research agenda. Indeed, beauty work was both understudied and undetermined, while these methodological choices sought to open-up ways of understanding these phenomena without dogmatically subscribing to pre-existing theories or overused tropes.

As I understood, ethnographic methods, involve, in part, ‘being there, up close’ or ‘being immersed in the daily life of field sites’ (Ocejo, 2013:3). This method of participant observation involves the researcher engaging in the same social space as interlocutors, in order to capture and explore both the situatedness and unfolding of specific social practices (Madden, 2010). The method privileges the body of the researcher as the primary research instrument (Walsh, 1998) and seeks to explore the practices of participants in ways that other qualitative methods, like interviews, cannot easily access. Indeed, participant observation’s attention to granular details, interactions and micro-geographies could produce the rich data which would enable me to consider the unfolding of sociality in and beyond the salon. The salon provided one such space where this research practice could be pursued. As a young woman, I felt likely able to negotiate a reasonable presence there, despite clear aesthetic differences between my blonde, wavy, European hair and the hair and styles likely to be fashioned in a significant number of Accra’s salons – including, but not limited to, braids, weaves and chemical straightening. With limited experience living in or conducting research in Accra or any other African city, I felt that securing access to a particular *place* would be a useful position from which to start.

I expected my position to shift over time – negotiated somewhere between ‘participant-as-observer’ and ‘observer-as-participant’. While participant-as-observer ‘involves an emphasis on participation and social interaction over observing,’ observer-as-participant favours observation over participation (Walsh, 1998). Given language constraints, I expected that my position would shift according to whose conversation I was participating in or simply observing. This would not be a neutral endeavour and I was aware that I could not escape my bodily presence. How I came to negotiate a presence and how others would understand that presence would shape the data I would collect and thus what I would come to know about the city and its inhabitants (Coffey, 1999). This awareness would require a constant practice of reflexivity: listening carefully to the questions interlocutors asked me, descriptive notes of reactions and conversations and a surrender to the fact that much of what people thought about me, I could never really know. I would seek the help of a potential gatekeeper, who Cynthia eventually became, recognising, yet underestimating the difficulties of managing boundaries between friendship and fieldwork (Hammersley and Atkinson, 1995; Ocejo, 2013). My methods of data collection would include writing fieldnotes, during and after days spent in the salon, depending on what was considered appropriate in the setting. I expected to carry out more formal interviews with members of the government and industry professionals, which I would record and transcribe at a later date, as well as engage in archival and media-related work, particularly online news items.

I was also deeply interested in producing visual data that would complement, challenge and insert new meanings into my written work. The work of both De Boeck and Plissart (2004) and De Boeck and Baloji (2016) inspired me greatly in this respect, capturing images of Kinshasa across 'vertical' and 'horizontal' planes. In this 'entwining of ethnography and photography,' images of the city – its people, buildings and materiality – offered a visual grammar that both threaded together and broke apart the ethnographic narratives presented (De Boeck, 2017:144). With fewer words, Mikhael Subotzky and Patrick Waterhouse's (2014) photographic rendition of Ponte City – South Africa's tallest residential building – exposed the intimacies of race, class and gender as they played out in a post-apartheid Johannesburg. With limited time spent in any African city, spending time with the images presented in these books and exhibitions was an important exercise in deconstructing dominant visual narratives of African cities I was perhaps more familiar with. I was thus interested in what an entwining of ethnography and photography could offer my attempt to contribute to a postcolonial urban research agenda.

This decision did not go undebated. I was both aware and critical of the potential of photography to reproduce colonial relations of unequal representation and an exoticisation of 'the Other.' In the past, photographs functioned as 'epistemic truths,' which served to produce an undisputed image of Africa as the 'dark continent' and justify imperial domination therein (Mabry, 2014; Landau, 2002). In recent decades, images of the vast continent continue to circulate as 'Africa,' with common tropes of war, disease, poverty and famine often underlying them (Mabry, 2014). Yet, with reference to Okuwi Enwezor's *Snap Judgements* catalog of African photography (2006), Hoffman comments that 'the dominant images of Africa, images of unrelenting misery or untrammelled natural beauty, are simply "no longer plausible" after decades of repetition' (2017:30). Indeed, photographic work challenging these tropes is on the rise and social media has played an important role in shifting representational power from the West. However, I could not escape the significance of the meanings attached to a white woman taking photographs in a West African city. As I later discuss in the thesis' conclusion, I did not pick up a camera for months, for fear of imposing myself, objectifying interlocutors and violently extracting images from a space I was not invited into. However, this photographic endeavour began by simply documenting scenes and objects. Later, when relationships were established, I felt more at ease in capturing portraits of people and this provided an important way of engaging with inhabitants across the city. I remained committed to an ethics of permission-seeking at all times and took with me a polaroid camera, which allowed me to print a selected number of images immediately, hoping to offer some reciprocity in the encounter.

The image has been redacted for copyright reasons.

Image 13 - Preparing egg, bread, tea and Indomie.

As the research progressed, photography seemed to offer an important way to capture a shifting set of landscapes that for lack of adjectives, phrases and colour variations, I could not easily describe. These sought not to present an objective truth, but reveal something of the kind of spaces in which I was working and how I saw them. Moreover, with the critiques aforementioned, I felt that photography could offer an important reminder of my embodied presence in the field. While I did not feature in any images, their very production exposed my continued being. While some images captured people-less landscapes, others included portraits of people both at Awoshie Junction and the sandpits. These portraits exposed some of the ways in which people chose to interact with and present themselves to me, meanwhile exposing my own presence. I have included images throughout the thesis, hoping to offer the reader a way of engaging with the work beyond the written words, with the potential of building alternative narratives that may complement or contest those I have chosen to present. I have included extremely short captions to provide some brief information, however, these are not intended to be final, but rather revisable ways of speaking of and through these images. I hope that the images, captions and text, together open-up a space of interpretation for the reader. Note: unless otherwise stated, all images are the author's own.

The image has been redacted for copyright reasons.

Image 14 - Shop portrait.

AWOSHIE JUNCTION

The potential methodological and theoretical productivity embedded in beauty work is what took me to the salon and the salon is what took me to Awoshie Junction. Set within the space of the Awoshie suburb of Greater Accra, the junction demarcates its own rhythms and ruptures within the broader time-spaces of the metropolitan region. Forging a link between an East-West road that spans across the urban region, with a road that extends towards the northern-most part of the Greater Accra Region, the junction constitutes an important hub of connection, linking Awoshie to other suburbs, the central Accra Metropolitan Area and other regions beyond Accra (see figs. 2 and 3). While the junction itself falls within the very edges of the Accra Metropolitan Assembly (AMA) jurisdiction, the remainder of the suburb of Awoshie sits within the Ga Central Municipal Assembly.

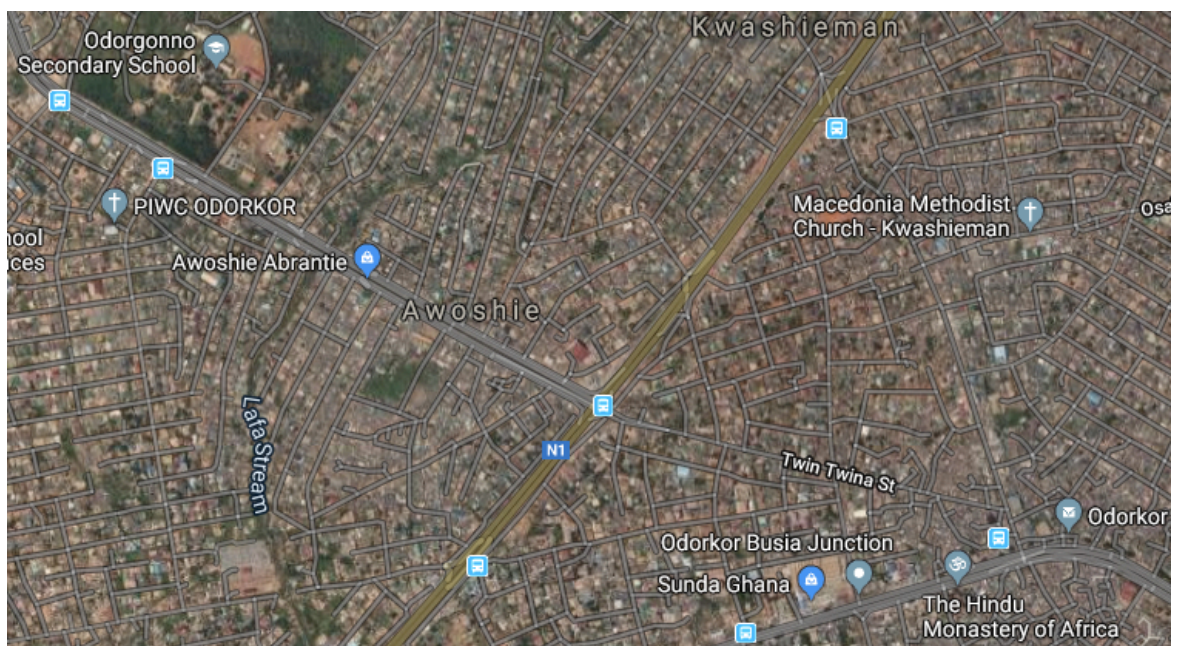


Figure 2 - Map of Awoshie (Google Maps, 2020).

On my first arrival, Awoshie Junction seemed to dissipate into its surroundings. Cynthia and I had taken a right turn off George Bush Highway where our *tro tro* fought out a place to stop. To our immediate right was a station home to trucks which spewed out a remarkable heat. Turning towards the road, we crossed the lanes of traffic in a haphazard, tentative fashion to the junction's other half. Carefully levelling my weight across wooden planks which spread across parts of the gutter, we approached the salon. Its sign read 'Evergreen Salon' and stood on its porch was Betsy, Cynthia's auntie and owner of the salon. Cynthia introduced us and I thanked her for having me. The salon was a modest space. Inside, a long mirror on one side of the wall sat above three chairs. At the back of the salon was a drum filled with water. There was no water connection here, so water was stored in the drum and used accordingly. Next to the drum stood a small concrete sink, which without water connection, was used in tandem with the adjacent drum. Next to the sink were three shelves full of hair products and accessories. The salon hosted one hooded dryer, a variety of hairstyle posters and

a small selection of hair accessories for sale. The salon was formed in part by a tiled porch, which stretched out into the space in front. Though small in size, it doubled the space of the salon and benefitted from an evening breeze which wrapped around this corner of the city. Hung above the porch was an extended corrugated iron roof which magnified the sound of wind, rain and local gossip.

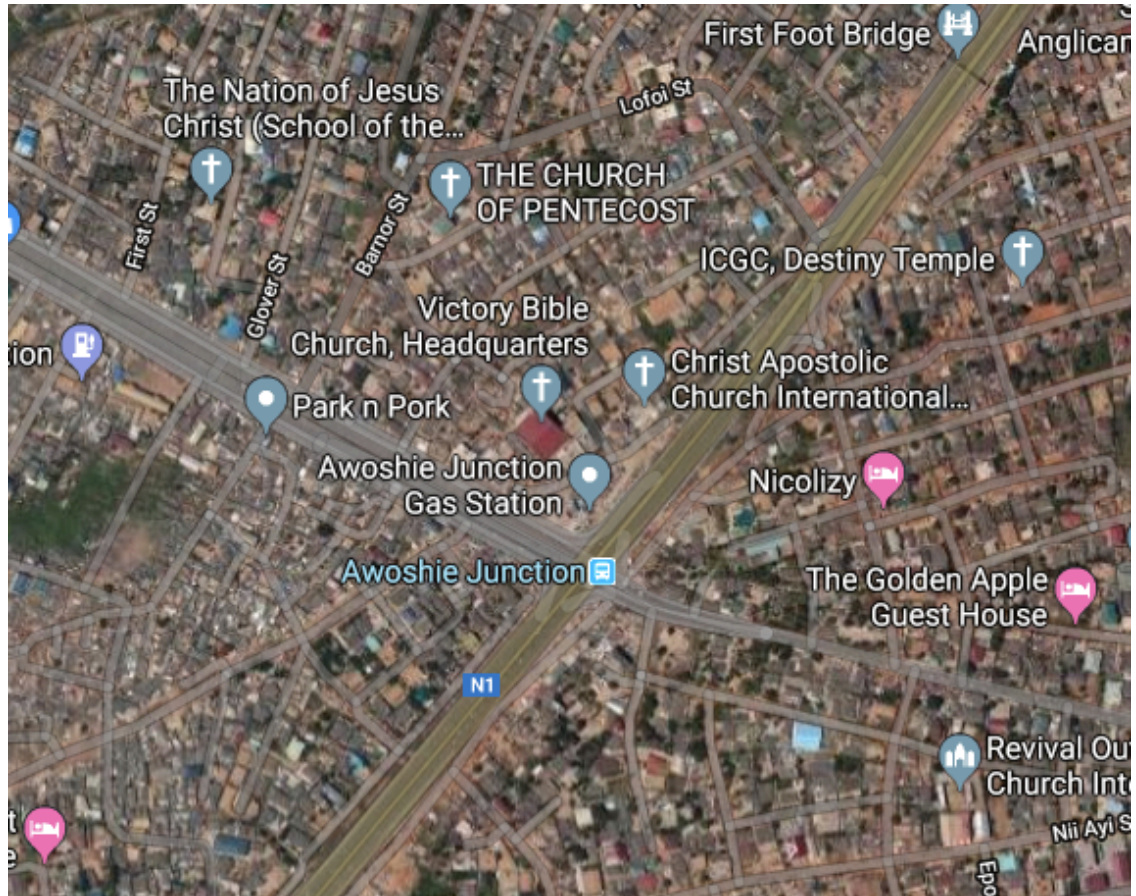


Figure 3 - Awoshie Junction (Google Maps, 2020).

The salon stood among a variety of shops and activities. To the left of the salon was Kofi's mechanic space, where a fan and two benches doubled up as a socialising and sleeping spot for both himself and his family. His wife who would later fall pregnant frequently rested in this space when their home, which lay just behind, became too hot. Next to Kofi's space was a small container, which remained out of use for the first part of my fieldwork. To the right of this and set slightly further back from the road was a mobile money and credit station, which remained busy throughout the day and night. Then stood Betsy's salon, which was positioned adjacent to Abena's shop. Abena's shop was not open to the public, but housed money and goods which she sold and exchanged at the roadside. To the right of this shop was a small store selling cold drinks, canned items and dry goods. This shop was owned and run by Afie, whose wider family owned this plot of land and that behind it. Another shop remained closed for the entirety of my fieldwork. Finally, at the very edge of this row of shops was a wooden container which served evening 'tea.' This included *Lipton* tea, *Nescafe* coffee, butter

bread, sugar bread, egg and *Indomie*. This shop was run and owned by a member of Afie's extended family, Emily. She and her three children lived in one of the houses which sat behind the row of shops.



Image 15 – *Indomie*.

The more immediate roadside hosted another string of commercial activities. At the very corner was David, a tyre craftsman, who bought damaged tyres from a nearby scrap outlet, repaired them and resold them. These tyres, he explained, had been imported from places in Europe. His roadside position enabled him to repair the punctured tyres of passing customers. His space was fashioned out of tyres which formed three edges of a small structure. A piece of tarpaulin hung above him, beneath which he sat on a chair and welcomed visitors and customers to sit on the adjacent bench and listen to the radio with him. Next to the tyres stood the popcorn machine. This machine was operated by Kwame, a young man who, every evening, without fail, reassembled the deconstructed the machine and prepared hundreds upon hundreds of packets of sweet and salted popcorn. This could be bought at the immediate roadside, but most custom was generated through the work of young men and women who weaved in and out of lanes of traffic, selling the bags to drivers passing through the junction. The popcorn machine did not belong to Kwame, however; he was issued with a small wage for his work. Every evening, he connected his laptop to a sound system from which he played the latest highlife, hiplife, hip-hop and Afrobeats songs. These sounds periodically echoed as the metal doors of *tro tros* passed by.



Image 16 - Passing *tro tros*.

Next to Kwame was Abena, who, in addition to the shop next to Betsy's salon, occupied the roadside, positioning a chair, table and umbrella upon wooden planks which spread across this part of the gutter. Upon her table sat piles and piles of coins arranged in sets of 10s and 20s, according to the value of the coin. Abena operated a money changing business, which serviced the many *tro tros* passing through the junction. Here, mates¹⁵ in need of change hastily exchanged their notes for stacks of coins for a modest fee. For instance, if Abena collected one cedi from a mate, she would return 80 peswas, as eight 10-peswas coins – thus charging 20 peswas for her service. She would exchange two cedis for 1.6 cedis as eight 20 peswas coins – and so on. Natalie occupied the space next to Abena. Here she spent the morning preparing yam, chicken, sausage, fish and pepper, which she sold to passers-by and those working in the area. The afternoon was spent ensuring a continuous supply of fresh fried yam, which she cooked at the roadside in a small frying unit. To the left of Natalie was Sadiq, Cynthia's boyfriend. He occupied a space he fashioned across the gutter. Here, he placed wooden planks across the open gutter, in front of which he stationed his glass cabinet. The glass cabinet stood approximately a metre and half high and its shelves were stocked with electrical accessories, including phone cases, chargers, earphones and replacement batteries. With limited funds to buy or rent a container, a glass cabinet was a good starting point to make money, he explained. He had negotiated with Betsy who allowed him to store his cabinet in her salon during

¹⁵ 'Mate' is the name given to the person who performs the duties of collecting money and issuing change on trotros. They are responsible for calling for custom, shouting out the windows and letting potential customers know where they are heading. The mate communicates with the driver, informing him when and where to stop and continue. Mates are almost exclusively men.

the night. Every morning, Sadiq would arrive early, open the salon, move his cabinet to the roadside and begin arranging his goods which were in disarray following the small distance the cabinet had travelled. In the evening, Sadiq connected his cabinet to Betsy's electricity supply in the salon, unwinding a wire which stretched across the passing place between the containers and roadside. The electricity connection allowed Sadiq to illuminate his cabinet in the evening where his goods would glow among the junction's lights. Sat next to Sadiq was a shoe repairer who possessed an incredible skill for restoring shoes. With amazing attention to detail, he could transform half a flip-flop or *chalewote*¹⁶ to a fully-fledged, working-soled shoe. Behind the shoe repairer was a small metal works station. This consisted of a metal plinth, upon which sat a metal block. Here, Kwabena brought metal parts of vehicles and remoulded them, first heating them on an adjacent fire. Behind Kwabena was Kofi's mechanic outlet. While no mechanical work actually took place here, he positioned an advertisement for his craft. This advertisement took the form of a standing wooden structure, upon which hung columns of small car parts, appearing from the roadside like a sculpture.

These people and things, left to right, shops to roadside, formed the parameters of my immediate research space. Here, each of the occupants knew each other and had spent several years working in close proximity to one another. Some were related, some were good friends, others were in long-term romantic relationships and others were more or less peers. But while some relationships were stronger than others, most inhabitants conversed daily. Much of this exchange tended to centre around the hair salon which occupied a prime position among the containers in this small stretch of the urban fabric. Whether they lived or worked close by, people would often use the small space in front of the salon to pass to the road, or the spaces behind, making the salon a focal point for frequent social exchange. It was here that both pleasantries and arguments unfolded, acting somewhat like a stage in the local social arena. The salon was popular in the neighbourhood and local inhabitants would come and spend time here, even if they didn't come to attend to their hair. People would often come and share neighbourhood news or discuss the plight of relatives who had recently travelled. Behind this space were houses which centred around a courtyard. These were home to an extended family who had acquired the land approximately twenty years ago. This family collected rents from those renting commercial space at the roadside. Behind the immediate research space were a variety of shops, including shops selling DVDs, hair products, a nail salon, a Pure water station and a framing workshop. Over time, my research space extended to include many parts of the homes and shops located here.

¹⁶ *Chalewote* is the name given to flip-flop shoes. It is a Ga phrase translated as 'friend, let's go'.

The image has been redacted for copyright reasons.

Image 16 - Preparing water sachets for sale.

On my first visit to Awoshie Junction, Cynthia took two chairs from the corner of the salon porch, arranging them next to each other, facing outwards across the junction. This became a regular spot for us. From here, I formed a view of the junction beyond the immediate realms of the salon. Of initial recognition was a building which loomed large over the junction. Constructed of pale bricks and a curved purple roof, the building appeared like a violet wave across the junction's skyline. It was in fact the headquarters of Victory Bible Church International, a charismatic church with branches all over the world. It reflected a sense of what Quayson calls an 'enchanted' landscape, marked by the rise of evangelical megachurches across the city, which, he argues, have had 'a significant impact on the overall contemporary social imaginary of self-making at least since the mid-1980s' (2014: 151-153). This building would become central in the unfolding of a struggle for space at the junction. At a similar plane, high above the ground, stood a large advertisement reading 'Menzgold', accompanied by the face of a Caucasian blonde woman – a woman to whom I was often compared. Menzgold is a gold dealership and investment firm which pledges an average of 7-10% monthly returns to customers on investments made with the company. However, following a series of investigations and warnings, in September 2018, panic was unleashed as customers' attempts to withdraw their funds from the institution failed (Ghanaweb, 2018).¹⁷ This followed the Securities and Exchange Commission's (SEC) demands to suspend the gold trading operations in the light that they had been operating without a valid licence from the Minerals Commission (ibid). Protests amounted at the grounds of Menzgold branches in Accra, and news of the controversy circulated nationwide (bbc.com, 2018).¹⁸ As the story progressed throughout 2019, the CEO, Nana Addae Mensah was convicted of defrauding by false pretence and was issued with a 1 billion Ghana cedi bail condition (Ghanaweb.com, 2019).¹⁹

Yet, sat in the shadows of this controversial billboard, advertising investment in the nation's most prized mineral, was a much humbler material: sand. Their formations so leaky that their edges almost disintegrated into the ground beneath, mounds of sand lined the edges of this part of the junction. This formed one of two stations which housed sand, stone and trucks. The first of these was the Sand and Stone Contractors Association, where drivers could bring sand and stone and receive a payment from the contractors, who would then proceed to sell it to customers in various volumes. The neighbouring station, which sat in a clearer view from my position at the salon, was Baah Yard Tippers Station. This station provided a space for trucks who collected and delivered sand across

¹⁷ 'The Menzgold story' (ghanaweb.com, 2019).

¹⁸ 'Menzgold: "I invest Ghc760, 000 all lock inside, if President Akufo-Addo no speak we go die"' (bbc.com, 2018).

¹⁹ 'NAM1 bail condition not favourable – Menzgold' (ghanaweb.com, 2019)

Greater Accra. As I have indicated, collectively, the groups of men who moved sand around the city in tipper trucks were known as the 'tippers.' The stations had once shared space and commerce, however, some drivers had become frustrated with the contracting situation, arguing that they were able to generate their own custom without the contractors and therefore make more money without a cut being taken. The station separated to become the two existing stations, and the Contractors moved parallel and slightly behind what would become the Tippers Station. Set amongst the Tippers Station were a series of small container shops constructed from corrugated iron and other metals. Here was a mosque which belonged to the tippers and other structures which housed an eatery and a small office, responsible for collecting fees from the tipper drivers to pay for the rent of the space and to contribute to a regional tippers union. Adjacent to the station was a row of shops and other commercial activity, which lined the immediate roadside. These ranged from the sale of electrical goods to salons and national lottery outlets. This land fell under the jurisdiction of the Odorkor family and there, more specifically, the Baah family bought land. A member of the Baah Family transformed his plot into a workshop, and thus this piece of land would become known as 'Baah Yard' - a name which continues to be used by members of the sand station, *tro tro* drivers and inhabitants of the city more broadly.



Image 17 - Junction in motion.

Between these shops and myself at Betsy's salon was a large road, made up of three main tranches. The first tranche directed traffic flows from central or western Accra north-west towards Ablekuma/Fan Milk Junction. The second and third tranches accommodated traffic passing from the north of the region to the west and east of Greater Accra. The 84.52 million US\$ road was built between 2011 and 2014 and funded through the joint efforts of the African Development Fund (ADF), Agence Francaise de Developpement (AFD) and the Government of Ghana (GOG). Falling under the project title of the Awoshie-Pokuase Road and Community Development Project (ADF, 2009), the 15km road was coupled with a series of secondary roads and socioeconomic infrastructure, including the provision of health and education services, as well as investments in expanding access to water and sanitation facilities. The project therefore aimed to 'promote sustainable economic growth and reduce poverty through greater employment and income generation opportunities; an increase in economic activities; improved accessibility to and within the project area; and enhanced access to socioeconomic infrastructure' (ADF, 2009: xi). Prior to this, the junction was home to a much smaller, rough road, which suffered from unrelenting congestion. The construction of the new Awoshie-Pokuase Road was significant in the junction's recent history and was an important milestone in inhabitants' recollections of how Awoshie had changed. When speaking with business owners at the junction, the construction of the road was perceived to have contributed to an expanded population and a growth in businesses throughout Awoshie and its surrounding suburbs.

The salon remained an important point of departure for me, both methodologically and conceptually. The salon was indeed an important space and much could be written about the role of this space in the wider city. Betsy's salon was more than just a microcosm of neoliberal structural adjustment, global cultural flows or urban labour: it was a place where these things were indeed produced, challenged and remade. It was a place where people came to meet and discuss both hair *and* electricity, nails *and* taxes – with neither considered more, or less, important. The salon was the city and the city lived through it. However, I became increasingly plagued by a personal discomfort with the topics I grappled with. Was I really the right person to be doing this research? While I do not necessarily agree that research topics should be tied strictly to identity (given the fact I was doing fieldwork in Accra), I felt that the potential racial implications of my embodied work could be more negative than positive. As necessarily spaces of the body, salons are places where the anxieties and pleasures of both gendered and racialised bodies are played out. Given the lines of racial difference between myself and those who kindly hosted me, I felt there was much I did not know, and questioned whether I could know in great enough detail, or with enough emotion, what these anxieties and pleasures felt like. Could a white woman represent these important spaces of Ghanaian, black, femininity? Could I do this justice? What kind of representational violence could I potentially contribute to? Of course, these anxieties were not limited to the salon and as I reflect later, the embodied nature of fieldwork more broadly meant this unease translated in different ways to

different sites. Yet, whether accurate or not, there was something quite particular about the embodied nature of salons that generated a rift I felt unable to both politically and emotionally navigate. As this discomfort magnified, I was simultaneously drawn to the spaces of Awoshie Junction, a place from which I began to build a view of the city.

WRITING THE WORLD FROM AWOSHIE JUNCTION

Given the changing parameters of my research, ethnography proved an important way to remain open to what the field may present. In order to gain some form of official consent for both my presence and unfolding research at the junction, I sought advice from a new acquaintance. His family had moved to Awoshie many decades ago when the land was 'all bush.' They had constructed a set of dwellings which continued to house members of that extended family. He had suggested that it would be well received if I sought permission from the Chief of Awoshie, the house of whom was located nearby to the junction. Following his several visits to the Chief's family, he advised that I should bring a selection of traditional gifts, which included two goats, alcoholic drinks and a sum of money in an envelope. He and a friend helped me source two goats (after several failed attempts at different markets), and we selected a couple of bottles of whiskey to present to the Chief. I was also informed that the Chief would be happy to share his insights on a historical and contemporary Awoshie. Weeks passed and eventually, I was invited to the house. I was informed that the Chief was out of town for some time so his brother had stepped in to fill all duties, including meeting keen urban researchers. By this time, the goats had been taken to the house, which left just the envelope and drinks to be delivered when we were invited to the house. The Chief's brother kindly greeted me and set out a set of chairs and a table at the front porch. Here, upon his own set of questions regarding my work, intentions and methods, he advised that I had permission to carry out my research at Awoshie Junction. He then invited me to ask any questions I had. I asked about the history of Awoshie and current contentions to do with land and displacements that were presently unfolding. An hour or so passed as he shared his reading and this was an important exercise in building an understanding of these developments from the perspective of traditional authority, as opposed to one limited solely by the parameters of planning. Yet, I remained astute to the reality that traditional authority is made up of many and sometimes competing positionalities, shaped by fraught histories, views and motives, which in turn produce differentiated narratives of the past, present and future (De Boeck and Balaji, 2016).

In this vein, the chief's brother offered one such rendition of Awoshie. He explained that Awoshie forms part of the ancestral land belonging to the Gbawe group, one of the Ga peoples' villages. In response to my question, the Chief's brother spent considerable time deliberating with a friend who had organised the meeting as to the meaning of Awoshie. Suggesting that it was difficult to translate,

he eventually concluded that Awoshie meant 'a supporter, like your underwear.' The suffix 'shie' was a common ending to the place names of Accra's suburbs, translated as 'under'. Thus, he explained, the popular marketplace of Kaneshie translated as 'under the lamp.' He narrated the coming of Ga groups to Awoshie to rear pigs on the land available here. Previously, Ga groups had created a pig farm in central north Accra, where pigs were reared the colonial government's soldiers. The land here, which today retains its name as Pig Farm, eventually fell under pressure from urban expansion. In 1960, he explained 'when the place developed, they had to move the pigs. They came to Gbawe and spoke to the elders and they gave them land here. At that time, all here was bush.' At today's Awoshie, a small portion of land hosting pigs remains, surrounded by dense development and increasing pressures to move the pigs elsewhere. The Chief's brother concluded, 'before they were rearing pigs. Now they've turned the whole place into a zongo...this place has turned into a city, it's in town.' His use of the word zongo was interesting. Zongo is a Hausa word, which translates as 'stranger quarters.' It is a word used to refer to the communities of people from northern Ghana, and includes the communities of 'Tudu, Sabon Zongo, Nima, Mallam, Accra New Town, Sodom and Gomorrah, and the Madina Zongo' (Quayson, 2014:203). These quarters date from the trans-Saharan slave trade, where 'an important feature of which was the creation of special migrant quarters in various towns along the commercial routes that were traversed by the caravans that plied them bearing goods and often also human beings for sale from North Africa and beyond' (2014:203-204). Today, the use of the word zongo may also be used to describe a place with attributes considered characteristic of zongos, including high population density, limited access to formal services, and largely informal housing arrangements and economies. Though he did not specify, we may speculate that the chief's brother's deployment of the word in his descriptions of Awoshie may reflect the relatively recent influx of non-indigenous populations into the suburb and a generalised increase in population density, among other characteristics. Indeed, Awoshie has exhibited some of the highest population growth rates in the metropolitan region, at 32.7% between 1984 and 2000, compared with only 3.3% in the city of Accra (Owusu, 2013:5).



Image 18 - Awoshie quarters.

Seeking permission through the realms of traditional authority was an important aspect of gaining relative legitimacy in the vicinity in which I spent a good majority of my research time. However, gaining permission from traditional authority could not secure access to insights from individuals at the junction. This required a much greater effort and the building of rapport and trust over time. As a gatekeeper, Cynthia was instrumental in making the first introductions and providing a place for me to be. However, gaining access to individual thoughts, daily opinions and intimate histories was negotiated at a much more personal level between myself and specific individuals. This required investing considerable time, allowing residents to get used to seeing me around, as well as regular greetings and patronising local businesses. A few inhabitants curiously asked what exactly I was writing and eventually a joke began circulating, suggesting I would ‘finish’ all the paper and pens in Accra. Over time, I was able to build relationships with a good number of people at the junction and the surrounding spaces. These relationships would form the early foundations of my research and were fundamental in generating an understanding of the shifting spaces of Awoshie Junction. Indeed, as the months passed, it soon became clear that Awoshie Junction was not a constant space. Its unrelenting flow of traffic, people and things was matched by underlying threats of spatial change and displacement.

Much of this early insight centred around a set of electricity wires that hung above the junction, including Betsy’s salon and a set of shops running adjacent to and behind her container. The spaces beneath electricity wires are demarcated as Right of Ways (ROWS) and earmarked as zones of non-

development – within which it is an offence to carry out a number of activities, including drilling, mining, farming or the construction of any building or structure.²⁰ While there are policies in place for the compensation of land owners and other land users during the acquisition of land for the construction of pylons, lines and ROWs, once the ROW is established, any activities or structures that encroach into the designated land are subject to removal at any moment without any form of compensation. In official urban planning documents, these ROWs are left as open space zones and obtaining structural permits for development is prohibited. While many transmission lines pass through less densely inhabited places, a significant length of the transmission network passes through urban areas, where it reaches substations before being converted for local distribution. As the transmission lines pass through cities like Accra, the demarcation of ROWs carve up urban space into designated zones of illegality. Despite the established ROWs throughout the city, people continue to inhabit these spaces for work and/or housing, given the high costs and limited availability of land in the city. Awoshie Junction is one such space where the ROWs are partly inhabited.

In the early months of my time at Awoshie Junction, threats of removal to those inhabiting the ROW began to surface. This was instigated with a visit from the Accra Metropolitan Assembly (AMA) Task Force, who approached Betsy and others to inform them that they were illegally located under the electricity transmission wires. They were directed to the landlord of the surrounding space, who proceeded to take charge, collect funds and handle meetings at the local district assembly. Throughout this period, I attended meetings at the local district assembly with concerned tenants, carried out individual interviews with shop owners and observed conversations taking place between tenants at the salon and elsewhere. Confusion soon emerged as money could not be accounted for and threats of removal continued. In this situation, trust was rapidly lost between tenants and the landlord, and amongst tenants themselves, while a continued set of unfolding situations prompted widespread anxiety among inhabitants. Many residents recounted previous attempts by the state to remove them, some successful, others not, but noted that if ever they had been forced to move, they returned soon after. Many also attributed recent threats to the arrival of the new road, which they said had made their presence more visible to the state. As months passed, the situation was temporarily resolved, as tenants reached an agreement with the local authorities. Despite this agreement, their understanding was that their presence was not secured in the long-term. It was a matter of ongoing temporariness.

²⁰ As set out in the Volta River Authority (Transmission Line Protection) Regulations, 1967 (LI 542) as amended by Regulation No. 1737 of 2004, a distance of between 30 and 40 metres is demarcated, depending on the voltage of the transmission line (Volta River Authority, 2005).



Image 19 - Under the wire.

Meanwhile, across the road, on the opposite side of the junction, controversy was unfolding between the church and the tipper station. As was relayed to me, since the late 1980s, the church and the Baah Family had been in dispute over the land upon which the tipper station was located. Following more than eight years of court hearings, the land was awarded to the church.²¹ As tenants

²¹ 'Victory Bible Church Int'l clears air over Baah Yard land' (Starrfm.com.gh, 2018).

analysed the situation, they argued that the favourable outcome for the church was premised on their huge financial capacity and political connections. As letters of final removal were distributed to the sand station and other occupants of the plot in front of the church, the situation became increasingly tense. For many, moving elsewhere was not an option, given the cost of nearby land and the fact that their temporary structures were in fact attached to concrete foundations, and much of the infrastructure invested in and around the shop was not mobile. Clashes emerged following the church allegedly bulldozing structures ahead of the final removal date, including the tippers' mosque. This prompted the tippers to throw rocks at the church, smashing the windows and denting the building's panels. Armed police and military personnel arrived at the scene, protecting the church.²² As anxiety mounted across the junction, Sadiq offered his reading of the situation:

'There is pressure in Baah Yard right now. It is hot. These people (gesturing to the kiosks on the other side of the road) make wild. High tension²³ make wild. They will be sacked²⁴. Next month, we will celebrate Christmas here, and there is no money. They are sacking everyone. So we make hot. Pressure here and pressure there. By 2018, there will be more pressure. More people will be sacked and the AMA will be back to worry us again.'

When Mbembe and Nuttall made a call to write the world from an African Metropolis, they marked this as 'an exercise in writing the worldliness – or being-in-the-world – of contemporary African life forms' (2004:347). Awoshie Junction became one particular way of writing the world from an African Metropolis. In doing so, it emerged as an integral site to my research. Indeed, looking out across the junction from the salon, I began to build a view of the city, albeit a very specific, in-situ view. Awoshie Junction was a significant landmark in this region of the city and was a place through which flows of people, goods and vehicles passed through relentlessly. Young men carted recycled copper; young women carried cold drinks for sale to passing traffic; tipper trucks transported sand and stones; *tro-tros* collected school-going children and street-side pastors shared the word of god. The junction was, in the words of De Boeck and Baloji, a kind of 'thickening' (2016:109), where the energies of the city coalesced around its time-spaces and awaited their re-distribution into the elsewheres of Accra. It was also a space in which place-based politics unfolded, spatial insecurities took hold and people attempted to grapple with the shifting contours of their lives. Thus, as things, people and vehicles moved through the junction on a daily basis, concrete buildings gradually grew and metal structures were dismantled overnight. Yet, Awoshie Junction was also more than the sum of its immediate visible parts. It was place through which I was able to chart out flows, connections, frictions and displacements that spanned across, between and beyond the junction, the city and the nation. In

²² 'Muslim Youth Threaten to Retaliate Victory Bible Church for Mosque Demolition' (xyzonline.com, 2018).

²³ Another name given to the electricity transmission wires.

²⁴ Meaning 'removed.'

this way, Awoshie Junction became a mode of seeing the city from a specific locus – a mode of intersecting the near and the far, the past and the present. It became a set of both visible and invisible landscapes, or a ‘series of intersecting material and conceptual terrains that [can] promote wider reflection on the meaning of spatial ambiguity, complexity and multiplicity’ (Gandy, 2016:433). Indeed, Awoshie Junction emerged not simply a place on the map, but as a ‘creative act’ (Burckhardt, 2012 [1979] in *ibid*, 434) – a practice of following lines, drawing connections and excavating histories. And as I show in the following section, it is this ‘creative act’ which undergirded the thesis’ deeper engagement with sand.

SHIFTING SANDS

As I developed this practice of intersecting, I looked more specifically to the material of sand, which seemed ever-present, yet ever-ambiguous in this shifting landscape of Awoshie Junction. I began asking more specific questions. Where was this sand taken from? Which grounds were shifting in its absence and presence? What kinds of sandy landscapes may be linked to the landscapes of Awoshie? Many of these questions surrounding sand began to surface prior to the sand station’s removal. At this point, as I looked out across the landscape of Awoshie Junction, it became impossible to ignore the tonnes of golden grains which passed in, through and beyond the sand stations. Seeking advice from Sadiq, I expressed an interest in meeting the tipper drivers and joining them on their excursions to both gather and deliver sand. This took considerable time. It involved greetings and meetings over the course of a month with Kojo, the Station Master, who eventually introduced me to Addae, who kindly offered to take me on his truck, which he would drive. It was at this moment that my research shifted, from an ethnography of a place to an ethnography of a material. From here, I would ‘follow-the-thing’ (Cook, 2004) as it moved across Accra, seeking to understand more about the places and people implicated in this mobility. How did sand move across space? With what consequences? Who was involved in these labours?

The image has been redacted for copyright reasons.

Image 20 - Upon a sand truck.

On the day of my first outing, I arrived at Awoshie Junction early on a Tuesday morning. It was just after 7.30am and marked the first occasion I had seen the space at this hour. As the sun continued to rise across the junction, traffic densified and people passed by the salon to their various destinations. ‘You’re here early,’ a young girl called out to me, recognising that I usually arrived late morning. A preacher stood in front of the salon at the roadside, with a microphone that amplified the word of God toward and beyond the aluminium roof that hung above me. Alternating between

Twi and English he read aloud passages from the Bible. In English, he preached about the value of inhabiting who you are, proclaiming, 'if you are white, you are white.' I wondered if this was directed at me, or just a strange coincidence. People passed the preacher, handing him money, at which point he would interrupt his dialogue to thank and greet the giver 'good morning.' Some hours passed before Sadiq and I received the news that the sand truck we would be joining was back from its most recent delivery. Eventually, we crossed Awoshie Junction's eight lanes of traffic to the other side and greeted Kojo. Parked in front of the church was a dazzling-orange truck. It was a HOWO Chinese branded dump truck that I would soon come to recognise on the road. I was introduced to Addae and Yaw who shared the driving and Francis, who performed the duties of the mate. I was told that the mate was responsible for guiding the sand on and off the truck. I climbed up the narrow stairs into the truck, gripping the handles affixed to the body of the truck. After removing my shoes in the front, I scrambled to the backseat, manoeuvring into a position on the long leather bench behind the two seats in front. Sadiq, myself and Francis shared this space, which required regular movement to keep comfortable and a tight grip on whatever possible when the roads became increasingly uneven outside of the city roads.

As we left the station, I took my notebook out of my bag and began asking questions. They laughed and said that they would only speak to me in *Twi*, so I had better learn fast. They asked me about sand in the UK, which embarrassingly, I did not know much about and this prompted a series of reasonable questions as to why I was coming to learn about sand in Accra. They laughed and said that when they first saw me at the tipper station, they thought I had come to buy sand to build myself. I explained that while I did not know much about sand, my grandfather had spent his life's work transporting sugar around the UK, and so I was not new to lorry trucks. They often conversed in *Twi* and I asked Sadiq to translate. Conversations varied from complaining about the difficulty of sustaining a life in Accra to the recent news of Wayne Rooney's drink driving scandal. We took the main road in the direction of Pokuase but made a turn not far from where we had left at Awoshie Junction. We climbed the hills, the truck's wheels dipping into the uneven land beneath us. We delivered the sand to a house under construction in the hills of Awoshie. I would quickly learn that sand was used for construction purposes. Mixed with cement and water, it would morph into the building blocks of the city or be flattened out to extend the roads of the urban region. As I gathered my bearings, I enquired about the location(s) of their work. Where did they get the sand from and where did they take it to? Gesturing outwards, Francis replied, 'the new new places. The places are far.'

Addae, Francis and others kindly allowed me to move with them as they shifted sands across the city. This involved travelling to sites where the sand was extracted, known as the 'sandpits' and delivering

to it to customers at various points of sale in Accra. By moving with the tipper drivers across the Greater Accra region, the city was presented as a shifting stage upon which they could comment. Here, the growth of the urban and the complex and contested nature of land reigned supreme in these discussions. Their story of sand was as much a story of the city and together, their readings offered up an important narrative of urban change more broadly. As I moved with them, I became interested in labours surrounding of sands and how they experienced their life in the city. They shared their life histories, their daily stories, long-term aspirations and their political critiques of local and national politics. This allowed me to build insight into the labours of sand and the way in which the material was implicated in the lives of the city's inhabitants.

THE SHIFTING SANDPIT

These movements between sandpit and city were paramount to developing a spatial understanding of the city, its expansion, its limits and some of the labours integral to the sand economy. However, given the time constraints of the tipper drivers, limited time was spent at the sandpits themselves. Yet questions remained. How was land acquired to unearth the sand? Who owned this land? How were the proceeds distributed? How was the land managed? How did these broader economies of sand function? What were the socio-ecological implications of this extraction of sand? I decided to seek out a longer term engagement with a sand contractor operating in the region.

With Cynthia's help and advice, we made our way towards Ashalaja – a town from which we could gather our bearings and locate sand contractors nearby. We took a taxi and tracked a contractor. Here, we dismounted, and dodging between sand trucks, we approached a group of men who occupied the edges of the pit. In *Twi*, Cynthia explained my research and sought permission to join them at the sandpit for the day. They looked at me slightly perplexed, and then directed us to their boss, Mr Osei. Mr Osei was a gentle-walking man in his mid to late sixties. Cynthia repeated her requests to Mr Osei and he agreed that we could spend some time with his company. The sandpit did not remain in-situ for long. Given the huge demand for sand and the relatively small parcels of land from which it was extracted, the contractors were required to move regularly, shifting the sandpit across space to extract sand from new plots of land. Over the course of the proceeding 6 months, I shifted with this company as they shifted with the sands across this region of Greater Accra. This required continuous effort to locate their whereabouts on a daily basis. Without a car, Cynthia and I used a combination of *tro tros*, shared taxis and private taxis to reach the shifting sandpit. Our return, however, was accommodated by a tipper driver leaving the sandpit in the late afternoon or early evening and kindly dropping Cynthia and I at a spot where we could make the remaining

journey by *tro tro*. Moving with a variety of tipper drivers allowed me to build an even greater picture of where sand was moving to and from across the region, beyond those journeys made to and from Awoshie Junction.

The image has been redacted for copyright reasons.

Image 21 - Labours of sand.

At the sandpits, despite having permission to be present at the pit, access was negotiated at an individual level. Here, I sought to gain insights from those employed by the sand contractor: individuals collecting fees, employees taking note of the number of trucks, those directing trucks, those driving the bulldozers and operators of the pay loaders. These insights provided a good understanding of the intricacies of the sand economy and these employees, together with Mr Osei, were able to answer many questions I had regarding the acquisition of land and the extraction of sand. Equally, I sought to understand more about the broader labours of sand, which required in depth observation of the many kinds of work at the pit, as well as interviews with those engaged in this work - usually requiring translation from *Twi* to English with the help of Cynthia. I continued to use photography as a way to both engage with interlocutors and also provide a space through which my writing could be potentially challenged and remade.

As the research progressed at the sandpits, I conducted interviews at various government offices and commissions. Indeed, I spent considerable time with the Chief Executive of the Ga South Municipal Assembly (GSMA), the municipality in which the bulk of my research at the sandpits was conducted. He introduced me to relevant officials working within the local state, including the security liaison officer, responsible for implementing policies to bring about security in the municipality, as well as an official at the Bureau of National Intelligence (BNI), with whom the security liaison officer worked in close remit. I conducted an interview with an elder at the Ashalaja office of traditional authority, who kindly shared the town's long history with me and this interview featured at the opening of the thesis. Here also I was introduced to a local politician who shared his insights on recent changes in the town and its surrounds, who similarly featured in the opening. Additionally, I met with other members of traditional authority, including a Ga chief in the municipality, who provided a compelling rendition of changing land relations in Greater Accra. Alongside these meetings, I conducted several interviews with officials at the Minerals Commission, the Head of Mining at the Environmental Protection Agency (EPA) and members of the EPA at a local branch in Amasaman, Greater Accra. These interviews provided an opportunity to verify practices I had seen, as well as ask questions regarding broader governmental concerns and policy surrounding sand winning. Their insights provided significant data that I weave throughout the thesis.

Thus, over the course of a year, while the parameters of my research shifted considerably, I sought to retain a commitment to a postcolonial urban research agenda and a methodology which favoured ethnographic practice where possible. This close attention to place, people and things set the tone for a research endeavour that was mind opening, exhilarating and anxiety provoking. What began as a study of a particular kind of place, transformed to a study of a junction and eventually a material, which would, in turn, take me to other places, things and people. However, the research undertaken at the salon and at Awoshie Junction was not redundant. Awoshie Junction was a place I returned to frequently and was a space which became closely interwoven with questions of sand and city. Indeed, more than simply a path to sand, these spaces brought to view the lived experiences of inhabitants subject to chronic and unrelenting instability as well as their aspirations to live in and beyond the city. Listening closely to content of their concerns, their anxieties and dreams provided important ethnographic insights from which I could draw as my research progressed.

To conclude, choosing to understand a city through sand opened up a different way of seeing the urban. This view rendered visible a shifting set of landscapes that drew together people, time and space into ever-changing configurations that demanded new kinds of theorisations. As I shifted with the sands and the sandpit, my interests were governed by a fascination with the life of sand prior to its materialisation as urban form, or *the ante-lives of urban form*. These ante-lives would form the underlying premise of the research endeavour.

LITERATURE REVIEW: UNEARTHING A CITY OF SAND:

UNEARTHING A CITY OF SAND

In the introductory chapter to this thesis, I presented a discussion of sand as a natural resource and one integral to historical and contemporary urbanisation processes. Indeed, constituting both micro materials to serve the digital world and the concrete foundations of the planet's largest structures, sand is an integral component of our contemporary moment. Sand also emerged as a significant material in the landscape of Awoshie Junction. It was brought here upon the trucks which traversed the city's very edges and was laid to temporary rest in stations, where it would await sale. The presence of sand at Awoshie Junction also signalled its significance in the city writ large: it was a material at the centre of the city's expanding form and indeed positioned as integral to the life of the nation. Despite the importance of sand in cities like Accra, our understanding of this material remains attached to the historical development of the US and the contemporary urbanisation of China and India. By turning to the contemporary extraction and consumption of sand in a growing West African city, I suggest that we not only write this story from a continent projected to experience unprecedented rates of urbanisation – but more specifically, we expand the terms of debate surrounding the urbanisation of sand and expose both the role of historical trajectories particular to place and the specificities of socio-natural contexts in shaping the terms through which sand is urbanised. With these imperatives in mind, in this chapter, I present a review of existing literature through which to situate the urbanisation of sand in Accra. In this way, 'unearthing a city of sand,' pertains to the theoretical manoeuvres necessary to situate sand and the city in a productive conversation.

This manoeuvring begins with a discussion of the political-economic and cultural shifts which help us situate the demand for sand in Accra more specifically. This is followed by a discussion of the limited engagement with sand across the social sciences and Yusoff and Clark's call for a 'politicization of the geologic' and a 'geoloization of the political' (2018:16). From this point of departure, I detail an engagement between the geologic and the social in Ghana more specifically, arguing that here, socio-political and geologic formations have long been entwined. In turn they have shaped the rise and fall of political units, the nation's often violent encounters with the world, and the continued transformation of the Ghanaian economy. In this remit, I suggest that the extraction of sand and its subsequent urbanisation presents an important extension to this geosocial analysis and departs from an engagement with prized minerals like gold.

With these arguments in mind, I turn to three sets of literatures which provide an important grounding for situating the urbanisation of sand theoretically: extractive industries, extractive urbanism and urban political ecology (UPE). A vast literature on the extractive industries provides a good foundation for understanding the political economic processes of extraction and how these have unfolded in Ghana more specifically. Yet this literature remains tied to particular kinds of materials, like gold, diamonds and oil. This, I suggest, may be a product of the transnational geographies of these resources, the political-economic parameters of an extractive industries literature, an idea of which resources are considered politically important and finally, the kinds of data both available and rendered usable for theoretical analysis. Seeking to bring the conversation closer to urban analysis, I detail a sporadic literature on extractive urbanism, which, through various means elucidates the kinds of relationships engendered between extractive and urban processes. However, I argue that these analyses tend, though not exclusively, to privilege the effects of mineral extraction *on* cities, as opposed to detailing the co-constitutive nature of extractive and urbanisation processes. Moreover, they fail to capture the kind of material transformations that the urbanisation *of* a resource presents. With these critiques in mind, I turn to UPE as a significant theoretical basis through which to politicise the material transformations undergirding the urbanisation of nature and the situating of the city as a socio-natural process. While offering an important language, UPE remains limited by its privileging of metabolic flows (Myers, 2016), like water and electricity, which, unlike sand, continue to circulate unevenly in the city. This renders sand largely invisible in UPE literature.

The image has been redacted for copyright reasons.

Image 22 - Nearby residents come to the sandpit.

Through critiques of these literatures, I suggest that analysing the urbanisation of sand has much to offer on several fronts. Firstly, it expands our understanding of extractive practices beyond prized minerals, presenting opportunities to detail domestic geographies of extraction and consumption that remain integral to significant processes underway in cities across the world. Secondly, an analysis of the urbanisation of sand serves to strengthen an understanding of the relationships between urbanisation and extraction as co-constitutive processes, exposing the fundamental material links between resources and cities. Thirdly, analysing the ways in which sand is brought into the remit of the city serves to expand a theoretical engagement with the city as a socio-natural process through the prism of a material largely omitted from existing debates, thus extending our understanding of the fundamental links between nature and the built environment. Thus, alongside the need to shift the coordinates of the current dominant sand stories and expose the significance

of historical trajectories and situated socio-natural contexts, as well as extend an analysis of Ghana's geosocial formations, an analysis of the urbanisation of sand presents an important opportunity to develop our understanding of both urbanisation and extractive processes in significant ways.

URBANISING SAND IN ACCRA

In Greater Accra, sand and gravel have long been extracted for construction purposes. Under British rule, the 1892 Towns Act stipulated that, 'Whenever the Director of Works shall require materials...for the construction or repair of any street, bridge or drain...and the same are obtainable from any unoccupied land in or near to any town, he or any person authorised by him may enter upon and take from such land such materials as may be required, without compensation being made therefor to any person' (Towns Act 1892). Effectively, this suggests that construction materials used for colonial state building were extracted locally and with little financial cost to British government. Akurang-Parry also documents the use of forced labour to reduce costs for road building in southern Ghana, where women 'cleared the bush, swept the paths, and carried sand and rocks for the building of roads' (2000:7). Broadly speaking, traditional houses were predominantly built with clay; however, those building with aggregates and cement would likely have sourced sand locally. The local sourcing of building material is perhaps not unusual, given the relative expense of transporting low value aggregates to construction sites, compared to the prized minerals of gold and diamonds. However, in some cases, cement structures were prefabricated in Europe and assembled in colonial towns (Njoh, 2009). Indeed, 'pre-cast concrete walls were hauled from Holland across the seas to Accra's (Ghana) promontory, lowered to rocking canoes and paddled precariously by intrepid natives over pitching breakers to distant shore, where they were set up miles away to compose a few lonely monuments of the industrial age' (Abrams, quoted in Njoh, 2009:304).

Today, sand is a material desired for the construction of concrete homes. Given its association with prestige, accomplishment and adulthood, home-ownership is desired across all income brackets in Ghana (Yeboah, 2003). Given the limited access to mortgages, many houses are self-built, marked by a protracted process of building when income permits. Purchasing materials and increasingly paying for construction labour over time, building a home can take anywhere between 5 and 15 years (Kavaarpuo et al, 2016:6). So prevalent is this practice that the informal provision of housing, including those delivered by small-scale enterprises and individuals, accounts for between 80 and 90% of national housing output in Ghana (Arku, 2009; Kavaarpuo et al, 2016). As such, in Accra, as in many other cities, it is 'individuals and households, not large building companies or governments, who are building the town plot by plot' (Page and Sunjo, 2018:76). In recent research, Choplin argues that these desires for a concrete home span the West African urban coastal corridor, where both the emerging middle class and millions of poorer people 'dream of a house with four concrete walls and

a sheet metal roof' (2019:5). In this way, Choplin argues that the cement block is 'presented as the new gold bullion for the poor' (ibid, 12). Indeed, despite the challenges of raising funds to acquire land and build a house, Asante observes that when it comes to building a concrete home, 'many low and middle income earners continue to devise ways to break the odds' (Asante et al., 2018:1226). Significantly, building a concrete home functions as a strategy to escape protracted regimes of insecure access to both housing and income, where avoiding escalating rents, working within the space of the home and investing in concrete real estate, presents a more favourable set of conditions. As Choplin argues, 'acquiring a plot, buying cement bags and building a house brick-by-brick out of concrete' is a way to 'break free from the vicious circle of precarity and insecurity' (2019:13).

Large cement conglomerates, like Dangote, which produce and distribute cement throughout the region have contributed to this 'cementification' process in West Africa by supplying the ubiquitous binder (Choplin, 2019: 4). Once a material 'linked to the white European colonial who constructed out of cement and clinker,' concrete has been re-appropriated and now 'perceived to be a local material, produced in Africa' (ibid, 6-7). Building with concrete also aligns with a vision of modernity and durability (Oppong and Badu, 2012; Modern Ghana, 2015). Indeed, despite its limited suitability to a humid tropical climate, cement blocks are preferred to the use of local materials like clay and wood, because of the perception of concrete's longevity (Choplin, 2019). The sandcrete block, which is a concrete block made of a high volume of sand, cement and water, is widely used across Ghana, Nigeria and many other sub-Saharan African countries and constitutes 90% of urban housing in Ghana specifically (Awolusi et al., 2015; Sholanke et al, 2015; Darko, 2007). Compared to the higher quality and more expensive blocks, which include gravel derived from quarried stone, sandcrete is an affordable alternative for households. Thus, while styles, size and storeys may vary, perhaps what might be considered relatively uniform across lower and middle class housing is the use of the sandcrete block as a walling unit.



Image 23 - Urban beginnings at the edges of a sandpit.

The demand for homes is set within a context of significant under-provision of housing stock nationwide, felt particularly acutely in overcrowded urban areas, like Accra (Gillespie, 2018). This shortage can be traced to the historical under-provision of housing under successive governmental regimes (ibid). Indeed, in what was the Gold Coast, the British-led administration supervised the construction of subsidised housing estates in the 1940s. However, these catered to war veterans, public and civil servants, and members of the colonial government (Arku, 2009). In the 1950s, the

colonial government initiated other housing schemes, yet these were unable to keep pace with the rapidly expanding urban population, benefitting only a limited portion of largely middle class inhabitants, many of whom worked in the large parastatal economy. The remaining population were housed in homes they either constructed themselves or rented from other self-builders (ibid). Following independence in 1957, the Ghanaian government placed the right to housing at the centre of their social mandate. Despite efforts, the overall impact was limited, with the newly formed State Housing Corporation (SHC), the largest housing agency in the country, completing around 24,000 units between independence and 1990 (Tipple & Korboe, 1998). Indeed, throughout the 1970s and 1980s, 'the population growth rate exceeded the rate of growth of the housing stock in every region' (Gough and Yankson, 2011:795). As urban populations grew in places like Accra, the majority of the inhabitants continued to live in rented or self-built homes – and for many, these were of poor quality and in cramped conditions.

In the late 1980s, the draft National Housing Policy (1986) recognised this growing nation-wide housing shortage and the persistence of overcrowding in urban areas, initiating a reviewed role for the state in the provision of housing (Arku, 2009). Under the auspices of the International Monetary Fund (IMF) and the World Bank, the Ghanaian government retreated from its role in the direct provision of housing, instead implementing policies directed at the de-regulation of land, the expansion of housing markets and the industry for construction materials (Arku, 2009). Indeed, set within broader macro-economic adjustments, including the privatisation of state-owned enterprises and the liberalisation of markets, the housing reforms sought to deliver housing supply through the promotion of private sector development, foreign investment and self-building. Yet, private developers have concentrated on the high end of the housing market (Obeng-Odoom and Amedzro, 2011; Gough and Yankson, 2011).

The result has been the sustained under-provision of housing for lower-middle and low income populations, generating a high incidence of slum dwellings, temporary shelter and a reliance on limited rental accommodation through private landlords. Indeed, the joint failure of the government and the private sector to finance and construct sufficient affordable housing for a growing urban population has meant that three-quarters of the nation's urban inhabitants are dependent upon the rental housing market (Mahama and Adarkwa, 2006).²⁵ Yet even for those with reasonable economic means, renting in Accra is challenging (Luginaah et al, 2010). The housing stock is not well maintained and landlords require hefty capital upfront. Exiting the rental market and owning a home is therefore extremely desirable (Asante et al, 2017). However, with houses provided by private

developers in the range of between US\$30,000 to US\$2,000,000, many Ghanaians are priced out. Thus, as Arku (2009) suggests, while housing needs are in part met by public and private providers for the high middle and high income groups, the middle and low income earners' *only* alternative to renting is to engage in the practice of self-building, a practice which is in turn marked by desires for both autonomy and prestige. Thus, a concrete city is unfolding at the edges of Accra. Marked both by constraints and desires, the cement block is a ubiquitous symbol of a particular kind of urban process currently underway.

Together, these accounts provide an important starting point for understanding the historical and contemporary forces driving the demand for sand in Accra. It is also important here to note that sand is not required only for the construction of housing, but it is required in significant volumes for the building of commercial structures, particularly individual enterprises, as well as for the construction of roads. Despite offering significant insight into the political-economic driving forces of sand demand, this analysis does not go far enough in helping us understand the specific ways in which sand *becomes* the city. Thus, this thesis seeks to supplement this analysis by unpacking the processes through which sand is urbanised – that is, brought into the realms of the city. To do this, I turn to a reading of geo-history.

GEO-HISTORY

Despite the centrality of sand to our social reproduction, as well as evidence of its eco-political implications (Beiser, 2018), limited academic work has engaged with this material. This, I contend, is a product of what Yusoff and Clark (2017) have described as a reluctance to position the geologic in more-than-human theorisations. Indeed, they argue that while we have seen a 'willingness to take the nonhuman, inhuman or more-than-human into account' in our theorisations of social life, 'certain types of loci or matter...have turned out to be more amenable to inclusion in this expanding ethico-political register than others' (2017:14-15). In this framing, they posit that post-human literature has largely centred the organic, where authors have sought to demonstrate the agency, resistance and politics of the more-than-human. Much of this absence has to do with both an imagined politics ascribed to particular organic material, where more-than-human engagements have centred around 'themes of life, vitality, the organic' (ibid, 14). Indeed, they argue that 'while the fleshy exuberance of biological life and the 'spooky' indeterminacy of sub-atomic particles were roundly enrolled in efforts to reimagine collective life...the basal depths and *lumpen* masses of the inorganic, the mineral, the geologic have proved rather more recalcitrant' (ibid, 15).

At this juncture, Yusoff and Clark contend that a 'geologic' turn has been a more recent phenomenon – much of it stemming from the political imperative of the 'geo' in the Anthropocene

debates (ibid, 15). I would argue that unlike the 'material-energetic' (Clark, 2018) possibilities of geological formations like oil for example - sand, perhaps the most mundane of all, is at risk of being under-mined in our reading of the more-than-human. Through their arguments, Yusoff and Clark propose a greater engagement between earth science and social science encounters, alerting us to 'the way geological strata might be seen to condition and enable specific social formations' (ibid, 6). In calling for a 'politicization of the geologic' and a 'geologization of the political', they opt for a thinking of the 'becomings of earth and society together' (ibid, 16, 6).



Image 24 - A stone quarry in the Eastern Region of Ghana.

In this vein, they argue that 'just as there are calls to thoroughly 'socialize the Anthropocene' (Lövbrand et al., 2015), so too are there rumbling pressures to 'geologize the social' (ibid, 6). Tracking a history of philosophical engagement with the relationships between human beings and inorganic nature, including both Marx (1857) and Braudel (1972), they offer up Deleuze and Guattari's *A Thousand Plateaus* (1987) as a potential way to engage with the unfolding of geological and social processes. Here, three main groupings of 'strata' or domains, are posited: 'the inorganic or geological, the organic or biological, and the 'alloplastic' stratum of human culture and language' (Yusoff and Clark, 2017:13). Unlike their predecessors, many of whom have positioned the earth as the ground upon which human experience is subsequently played out, Deleuze and Guattari 'keep coming back to the idea that our planet pulses with the possibility of destratification, new combination

possibilities, reorganization' – thus, 'all life in general...plays upon the potentiality of the stratifying-destratifying earth' (Clark, 2017:213). This observation coincides with Yusoff and Clark's recognition of more recent developments in earth science, including the 'emerging idea of a dynamic earth with multiple possibilities beyond its 'actual' state' (2017, 13). In this way, they argue that Deleuze and Guattari's conceptualisation upholds that 'every social formation is to some degree constructed through its own specific 'machinic processes' or tapping into the flows and stratification of a complex, eventful earth' (Yusoff and Clark, 2017:13).

In a historical reading of strata, Clark argues that 'interactions with the stratified composition of the earth's crust have long played a constitutive role in social and political formations' and that 'all social and political formations are implicated with specific geological formations' (2017:214). This allows Clark to write of 'geohistory' (2017) more broadly. The geologic, for instance, was deeply embedded in colonial ventures, shaping the way regions were mapped and exploited. Scott recounts the subterranean exploits within 18th century Europe as a 'reconceptualization of the inner earth' and a re-imagination of the horizons of earthly time itself, propelled from a 'biblically sanctioned few millennia to hundreds of millions of years' (2008: 216, 217). In this way, she argues that the horizontal movements across the planet's seas and the emerging sense of 'globalism' that these conquests engendered was matched by a vertical plundering of Earth itself. As Europe neared the end of the Middle Ages, the underground had been reimagined from a 'perilous realm out of bounds to human intervention' to a 'resource that could be legitimately and systematically exploited for the enhancement of human wealth (Williams, 1990)' (Scott, 2008:1855). These subterranean ventures re-scripted the earth as a place for material enrichment, propelling Europeans to every corner of the earth in search of resources; most notably, mineral wealth. This marked the early stages of a geologic science which mapped subterranean formations as worlds to be exploited and a science of imperialism itself. Indeed, Scott argues that:

'between the 16th and 21st centuries, diverse underground spaces have been mapped, excavated, imagined and bound up in imperial networks that drew together diverse colonial and metropolitan arenas through the circulation of ideas, knowledges and goods' (2008:1858).

In this way, Scott argues that colonialism was marked by an incessant verticality, where the violent extraction of valuable strata played a central role in European expansions.

In a compelling turn of prose, Yusoff's recent critique evidences this phenomenon through a racialised reading of geology. Indeed, in 'A Billion Black Anthropocenes of None' (2017), Yusoff powerfully asserts the violent role of geological grammars in their capacity to render extractable

those materials necessary for building Empire. In an effort to 'undermine the givenness of geology as an innocent or natural description of the world,' Yusoff exposes the logics through which 'coloniality and anti-Blackness are materially inscribed into the Anthropocene' (ibid. 10, 19). In this reading, 'black energy' – read as extractable energy – is the 'inhuman' bind which ties together both gold and slaves (mineral-as-property and person-as-property; ibid, 7). And it is this energy, violently extracted from earth and flesh, which undergirds the ferocious formation of the Anthropocene. Through this analysis, she makes a call to 'desediment the social life of geology, to place it in the terror of its coercive acts and the interstitial moments of its shadow geology' – a geology she reassigns as a billion Black Anthropocenes (ibid, 59). In this reading then, geology is not a neutral host of the earth's resources awaiting extraction, but rather a violent regime of categorisation that entrenches racialised hierarchies.

In this respect, the socio-political and geologic have long been entwined in particular and often violent ways. In Ghana, much of this historical dimension centres around the most prized mineral in the nation's geologic make-up: gold. Owing to a succession of tectonic events around two billion years ago, significant land masses of West Africa 'folded, faulted, metamorphosed, and were subjected to igneous activity and sedimentary processes, giving rise to the region's Birimian and Tarkwaian gold belts' (Hilson, 2002:13). The riches of this geology have in turn shaped the extractive logics of multiple political units. A history of gold mining in present day Ghana extends over 2500 years (Jackson, 1992), an extraction process that gave rise to the gold-rich Kingdoms of ancient West Africa. In the last 1000 years, however, the gold economy has been dominated firstly by Arab-African trade and then European commercial ventures (Hilson, 2002). By the fifteenth century, driven by the shortages of gold supplies in Europe and the consequent threat to currencies, the Portuguese dominated the West African trade in gold, naming the land *Mina* (translated as 'the mine') (ibid). This monopoly was later rivalled by the British and Dutch in the sixteenth century, while by the end of the century, the sugar plantations of the New World generated new and lucrative demand for the trading of slaves (ibid). Indeed, mirroring Yusoff's (2018) broader argument, Hilson argues that stagnated gold production was the 'direct result of a 200 year slave trade' (ibid, 20). Following the abolition of slavery and the announcements of gold discoveries, at the end of the twentieth century, gold rushes ensued (ibid). Indeed, across a three-year span at the turn of the century, 400 newly-found companies had invested £40 million in gold mining developments (ibid).

Thus, Ghana has long been encountered through its subterranean riches – a substantial history of which marks a violent process of exploitation and dispossession. More broadly, these geosocial formations have given rise to the extractive policies of successive independent governments and continue to shape contemporary foreign investment. The social and political formations of Ghana

are therefore, like everywhere else, deeply ‘implicated with specific geological formations’ (Yusoff and Clark, 2017:214). Those formations specific to Ghana help us understand the rise of political units and the nations’ encounters with the world. Yet this history has privileged the most prized of geological formations. I suggest that through the prism of sand, we are able to extend a geosocial analysis into the present while moving beyond the most historically visible minerals. In the following section, I turn more specifically to a literature on extractive industries, where I make this argument more thoroughly.

EXTRACTIVE INDUSTRIES

Owing to its lucrative potential, Ghana’s geology has been extensively studied (Schluter, 2006). In the past, gold dominated the landscape of extraction. Now, despite gold constituting 49% of the nation’s export value, pasted on the walls of the Mineral Commission – which functions as the first point of contact for prospective investors – are vast maps boasting the country’s diverse subterranean riches: diamonds, bauxite, manganese. Together, the extractive industries account for 64% of exports, 10% of GDP, 18% of government revenue and 2% of employment (EITla, 2019). The prominence of extraction in Ghana’s economy has been a historical process. While the decades following independence witnessed a decline in the exports of minerals and a generalised lack of growth in the extractive industries, the 1980s bore witness to a renewed fervour in this sector of the economy, marked more broadly by economic liberalisation.

In 1983, under the auspices of the World Bank and the IMF, the Ghanaian government launched an Economic Recovery Programme (ERP). Within a programme of liberalisation, currency devaluation, privatisation and deregulation, the mining industry became a principal recipient of these reforms (Hilson, 2004). Mining companies were privatised and incentives sought to attract capital drawn from global investors (Ayelazuno, 2014; Hilson, 2004). These incentives included a reduction of corporate income tax on private companies’ mineral production from 50-55% in 1975, to 45% in 1986 and then 35% in 1994, as well as import duties breaks on mining equipment (Amponsah-Tawiah and Dartey-Baah, 2011). Moreover, under the 1986 Law and with further legal backing in 1993, following a return to constitutional rule, the Minerals Commission was created, with the purpose of regulating mineral extraction and promoting investment in the nation. Today, the Commission’s vision is to ‘strive to make Ghana the leading destination of mining sector investment in Africa through creating a congenial atmosphere in which all stakeholders work as partners in a safe environment to achieve one common goal: sustainable development through mining’ (Minerals Commission, 2019).

The image has been redacted for copyright reasons.

Image 25 - Employees at the sandpits.

Subsequent governments continued to pursue neoliberal policies to promote the extractive industries, including Kufuor's National Patriotic Party (NPP), which passed a new Mining and Minerals Act in 2006, furthering the investment incentives across the industry (Amponsah-Tawiah and Dartey-Baah, 2011). Royalties were reduced from between 3% and 12%, to 3% and 6% and transnational mining corporations were able to acquire large mining concessions for extended periods of time, with a guaranteed security of use (ibid). These regulatory changes generated huge influxes of foreign direct investment (FDI) in the sector, attracting US\$4 billion between 1983 and 1998, which represented more than 60% of all FDI in the nation (ibid). This perceived success has contributed to what Ayelazuno observes as the 'new extractivism' (2013). Indeed, Ayelazuno recalls a shift in the positioning of resources in the growth potential of African countries, arguing that while in the 1950s, 60s and 70s, the 'reigning paradigm of development...was state-led industrialisation and modernisation,' by the 1980s, the pursuit of resource-led growth emerged as a key growth strategy on the continent (2014: 293). Key players in the development regime highlighted the potential growth prospects harnessed from natural resources and between 1994 and 2002, the World Bank channelled over US\$8.5 billion into the extractive industries (Campbell, 2009). Indeed, the World Bank's Oil, Gas and Mining Policy Division argues that non-renewable extractive industries

'are major contributors to many developing countries' economies. Proper stewardship of extractive industries and the revenues they generate has tremendous potential to lift people out of poverty and contribute to sustainable development. These industries create jobs directly and indirectly, transfer technologies and knowledge, and generate significant income. The fiscal benefits provide governments with a financial base for infrastructure development and social service delivery' (World Bank, 2009: 5).

Meanwhile, a growing literature on what has been denoted as the 'resource curse' casts a dark shadow over this potential growth. In what would become a highly influential thesis, Sachs and Warner (1999; 2001) present what they understand to be a curse of natural resources. The resource curse details the process through which a growth in exports generates an appreciation of exchange rates, which in turn serves to undermine non-resource sectors of the economy, including agriculture and manufacturing for export. This is known as the 'Dutch disease.' This macro-economic effect is supposedly accompanied by the 'perverse effects of windfall rents and the development of unaccountable, rentier institutions of the state' (Sachs and Warner, 1999 in Phillips et al, 2016:26-27). The curse of resources is also closely associated with conflict, particularly in African countries.

Indeed, early work argued that resource abundance served to underpin ‘the financial motives/opportunities for rebels to engage in armed conflict’, and functioned as a:

‘causal factor in (rentier) state weakness either through the propensity for corruption, misrule, authoritarianism or instability (Elbadawi and Sambanis 2000, Herbst 2000, Sachs and Warner 2001, Ross 2003, Auty 2004, Collier and Hoeffler 2004, Fearon 2005, p.483-507, Rosser 2006, Billon 2007, pp. 163-182, Collier 2007, Ross 2008, Lujala 2010)’ (Obi, 2010:483).

As such, devastation in Sierra Leone, Liberia, DRC, Republic of Congo and the Niger Delta have been read through natural resources, cast simply as diamond, oil or cocoa conflicts (Obi, 2010). Investigative reports by organisations like Global Witness and Human Rights Watch served to further this discourse of resource conflicts, while international organisations, including the United Nations continue to produce literature couched in these terms, including ‘Conflict Prevention in Resource-Rich Economies’ (UNDP, 2011). Meanwhile, the resource-curse perspective has been assimilated into a post-9/11 security-development nexus, arguing that weak, resource rich states ‘both harbour and represent a serious threat to development and security’ (Obi, 2010:484).

This discourse on resources as a blessing or curse has shaped engagement with Ghana’s recent discovery of commercial oil. Following offshore exploration in 2007 and the discovery of commercial quantities in the Jubilee Field, oil production officially began in 2010. Since then, new projects have continued to incite optimism towards the future of the nation’s oil economy, with oil production set to double over the coming years.²⁶ With further licensing rounds and Presidential promises of onshore exploration in the Voltaian basin, a certain ‘nostalgia for the future’ (Piot, 2010) characterises attitudes towards oil, with this industry positioned as a potential cornerstone in a shifting national economy, free from aid and unbound from its dependence on gold and cocoa exports.²⁷ Yet, as Phillips et al argue, ‘the *idea* of the resource curse has become a powerful narrative in a number of new oil-producing states in Africa, including Ghana’ (2016:26). Indeed, ‘oil discoveries bring an influx of not only major oil companies, but also innumerable advisory bodies, donors, consultants and NGOs versed in the international best practice of oil sector management’ (ibid). This is perhaps most aptly illustrated by Ghana’s joining of the Extractive Industries Transparency Initiative (EITI) in 2007, which presents itself as

‘the global standard to promote the open and accountable management of oil, gas and mineral resources...By doing so, the EITI seeks to strengthen public and corporate

²⁶ ‘Ghana oil production to double to over 400,000bpd in next four years’ (theafricareport.com, 2019).

²⁷ ‘Ghana starts to think big’ (petroleum-economist.com, 2019). See Weszkalnys (2008); Luning (2012) and Leonard (2016) for a discussion of the hope engendered through resource extraction in Africa.

governance, promote understanding of natural resource management, and provide the data to inform reforms for greater transparency and accountability in the extractives sector' (EITI, 2019b).

Meanwhile, the World Bank has funded a Ghana-specific 'Gas and Oil Capacity Building Project'²⁸ which seeks to 'improve management and regulatory capacity while enhancing transparency' as well as 'strengthen local technical skills in its emerging oil and gas sector' (IEG Review Team, 2019:1)

Critiques of the 'resource curse' have pointed to its limited capacity in helping us understand the complex relationships between resources, economies and people. Rather, working through the lens of political economy, critical analyses have stressed the need to cross-reference historic and context-specific dynamics with the global economic production of resources (Obi, 2010; Ayelazuno, 2013). Watts' (2004) work on the Niger Delta has been instrumental in this respect, exposing the shortcomings of a commodity-determinism embedded in resource-curse approaches, and instead presenting an analytical framework for understanding oil-based capitalism through a set of contradictory 'governable spaces' (the chieftainship, the ethnic minority, the nation state). In a similar critique of the resource curse, Ferguson (2006) has exposed the disjointed geography of global capital investment with respect to resources in African countries. In his analysis, Ferguson (2006) pits 'socially thick' models against 'socially thin' models of extraction. While Zambia's state-owned copper mines, which employed local communities in company towns, are positioned as 'socially thick', the neoliberal extractive capitalism of oil economies in Angola are posited as 'socially thin' (2006). Here, oil is extracted in enclaves, the workers live in gated communities, the industry imports its equipment, materials and skilled labour, and private armies secure the extraction zones. In this way, 'neither the oil nor most of the money it brings in ever touches Angolan soil' (2006: 35). Moreover, Ferguson highlights the uneasy relationship between counties which in 'conventional normative terms' are 'the "worst" and "most corrupt" states,' yet 'have often attracted very significant inflows' of extraction-based FDI (2005:380). Thus, in his reading of capital investment in mineral extraction, he writes

'capital does not "flow" from New York to Angola's oil fields, or from London to Ghana's gold mines; it hops, neatly skipping over most of what is in between. Second, where capital has been coming to Africa at all, it has largely been concentrated in spatially segregated, socially "thin" mineral-extraction enclaves...the "movement of capital" here does not cover the globe; it connects discrete points on it' (2006:38).

²⁸ 'GH: Gas and Oil Capacity Building Project' (World Bank, 2015).

This notion of enclave development presents a broader critique of the extractive industries and has served to draw comparisons across mineral extraction activities across the world. These enclave zones are

‘characterized by capital intensive production, in the midst of high labor surplus; large-scale often monopolistic production where extra economic coercion features as part of corporate control and where expatriate elites dominate key decision making. The enclave, moreover, is a key element in the extroversion of the national economy that is skewed towards external orientation frustrating national planning and economic independence, and increasing susceptibility to global market fluctuations of raw materials’ (Bond, 2006:30, quoted in Ackah-Baidoo, 2012:154).

In the case of Ghana’s recent production of oil, writers have noted the problems with attempting to bring development onshore to coastal communities, highlighting the limited investment in growing a high skilled workforce in oil related labour and a lack of concern for environmental impacts (Obeng-Odoom, 2015; Ackah-Baidoo, 2012; Van Alstine, 2014). Chalfin has offered a different kind of reading of Ghana’s offshore oil, arguing that, in contrast to the enclave model, ‘it is no longer the oil company but rather the state institution that serves as the agent of ingress and enclosure,’ constituting a particular kind of maritime political space (2015:115).

Beyond large scale extraction, artisanal mining in Ghana has received extensive scholarly attention (Hilson and Potter, 2005; Nyame and Grant, 2012; Aryee et al, 2003; Hilson, 2009). Unlike enclave mining, artisanal mining (ASM) employs between 300,000-500,000 people – constituting 60% of the country’s total mining labour force (Tschakert, 2009: 712). The substantial numbers of those employed in ASM have been linked to the era of structural adjustment, which generated high levels of formal unemployment and new dimensions to poverty, propelling huge numbers of individuals into precarious mining work – a significant number of whom were women (Hilson and Potter, 2005). This is a process which has been documented across sub-Saharan Africa more broadly (Hilson, 2009).

During the time in which the government re-structured the large- scale mining sector, the state also legalised small-scale mining, which had previously operated, relatively undisturbed, as an enterprise outside of the law (ibid). This formalisation process required small scale miners to apply for a license, involving paperwork, environmental impact assessments (EIA), interviews and fee payments – a convoluted process which has both deterred and prevented considerable numbers of small-scale miners from engaging with the process (ibid). Indeed, it is estimated that less than 30% of ASM operators are registered and licensed, and thus the majority of ASM operators are classified as

*galamsey*²⁹ (Aubynn, 2009). Nevertheless, given that the state purchases gold via agents and ‘does not discriminate over legal status when acquiring gold from mining villages,’ the sector continues to contribute a significant volume of minerals to the industry (Hilson and Potter, 2005:109). As Aubynn observes, since 1990, Ghana’s mines have delivered

‘on average, 1,000,000 ounces of gold and 800,000 carats of diamonds per annum over the period. Of this, an average of about 100,000 ounces (about 10 percent) and 700,000 carats (about 70 percent) of gold and diamonds, respectively, were produced by ASM parties’ (2009:64).

This work is laborious, dangerous and given the use of mercury in the extraction of gold particles from soil and rock, presents considerable toxic threats to the personal health and safety of miners (Nyame and Grant, 2012:168; Tschakert, 2009; Tschakert and Singha, 2007). Moreover, the widespread use of mercury is environmentally damaging, the excess of which is often discharged into water bodies, thus polluting water and degrading habitats (ibid).

The simultaneous expansion of both large and small scale mining (LSM and ASM) has generated significant friction. A huge proportion of mineralised land is under concession to large scale mining companies, which has displaced tens of thousands of inhabitants and limited access to resources which many people rely upon to sustain themselves and their families (Hilson, 2009). Where the government has awarded lands to artisans, complaints have often surfaced that these are the most unproductive. These factors have generated the conditions for small scale miners to encroach onto company concession land (Hilson and Potter, 2005). The result has been ongoing conflict between small scale miners and large scale companies and state security (Aubynn, 2009; Hilson and Yakovleva, 2007). For example, among other places, clashes have surfaced at the Ashanti Gold Mine in Obuasi and Abooso Goldfields Limited (AGL) (ibid). Broadly speaking, an anti-*galamsey* public discourse has taken root across the nation, casting those operating without a license as a threat to security, as violent criminals and a menace to be grappled with (Tschakert, 2009).

The image has been redacted for copyright reasons.

Image 26 - Living near a sandpit.

This survey of work provides an important grounding for understanding the nature of extractive industries in Ghana and the different approaches to understanding these political relationships

²⁹ *Galamsey* translates as ‘to gather and sell’ and in the context of mining, refers to the practice of extracting and selling materials without being registered with a license.

between people and the non-human world. It sets out the kinds of grand institutional changes that have taken place, the political economy of these shifts and the ecological implications thus engendered. This sets in place a foundation for thinking about the ways in which sand, as an extracted resource, fits or fails to fit, within this existing remit of research. I argue that this literature is dominated by an engagement with prized minerals like gold and diamonds, the vast majority of which are destined to leave the nation. The limited engagement with a mineral like sand could indeed be a product of sand's failure to cross national borders. Sand's mostly local scales of extraction and consumption render it less visible to transnational frameworks of data collection – like imports and exports – which political-economic critiques may tend to privilege. While this macro data is indeed incredibly important and significant in understanding the uneven flows of the wealth of resources, it renders invisible those minerals, like sand, which largely speaking, fail to cross these borders. In this way, these frameworks are more likely to privilege prized minerals of transnational character, particularly those that flow from the global south to north, where the most globally unequal relations of resource extraction may be analysed through political-economic critique. These terms of engagement with extractive resources have shaped which kinds of minerals get written about, by whom and from where, shedding light on why a resource, like sand, has remained 'off the map' (Robinson, 2006). This, in addition to a generalised anti-urban bias in traditional Africanist studies, may also add further weight in explaining why the extraction of sand, and its subsequent consumption within the city, has received limited attention.

Yet, as I show, sand is a material integral to the life of the nation and its cities and thus sand's extraction and consumption remains significant in its political, economic and ecological implications. Thus, I suggest, that the extraction and consumption of sand within Ghana, and more specifically within Accra, presents scope for expanding a literature on extractive industries in otherwise neglected, yet important directions. With this critique in mind, I turn to a literature which explores the connections between minerals, extraction and urbanism, broadly speaking and in Ghana more specifically, seeking to understand sand's place within or without this work.

EXTRACTIVE URBANISM

Mining and cities have long been linked. Timbuktu was founded on a trade in gold and slaves. The gold trade gave rise to the Ashanti Kingdom. Silver mining lay at the heart of the Spanish empire, and these mines generated the grandest urban centres in the Americas (Dore, 2000 in Bryceson and MacKinnon, 2014). The extraction of coal formed new towns in industrial Britain and the mid-nineteenth century California gold rush propelled hundreds of thousands of migrants – or the so-called '49ers' – to the mining camps surrounding the goldfields (ibid). These are just some of the more familiar stories that highlight the linkages between extraction and urbanisation. Indeed,

referencing Brechin (1999), Bridge (2015) points to the environmental history of San Francisco, writing that the city 'grew to prominence in the California Gold Rush and subsequently financed the silver mines of the Comstock Lode, the gold mines of South Dakota and the copper mines of Montana.' In this way,

'the cycling of mineral wealth through the city, and its fixation in urban space, leads Brechin to argue that the skyscrapers of San Francisco are technologically, economically, and philosophically the "inverted mines" of the city's massive hinterland: natural wealth excavated from the depth and piled up on the surface.'

In the same breath, Bridge writes that the dizzying skylines of Houston and Dubai represent a 'similar inversion: their thrusting towers and sprawling infrastructure embody the three-dimensional geographies of oil and gas fields in the Gulf of Mexico and the Middle East from which their wealth and power derives' (ibid).

Several works have explored the multifaceted relationship between resource extraction and urbanisation. A classic example is Ferguson's (1999) exploration of urban life on the Zambian copper belt, which offers ethnographic insight into both the rise and fall of mining urban life. In this narrative, Ferguson exposes the connections between resource extraction, migration, culture and the meanings ascribed to modernity itself, as they played out in the lives of those inhabiting the boom and bust of the Zambian copperbelt. In a rendition of cities in South America, Correa (2016) makes an avid call to recognise that urbanisation cannot be separated from questions of resource extraction, citing examples ranging from the planning of Belo Horizonte in nineteenth-century Brazil to the building of urban centres generated through US investment in Venezuelan oil in the mid-twentieth century. Through the use of timely examples, he argues 'resource extraction urbanism' reflects the intrinsic relationship between resource frontiers and urban processes. In a similar turn of phrase, Kirshner and Power (2015) write of the 'extractive urbanism' in Mozambique. Writing from Tete province, which has been the epicentre of several coal mega-projects, they argue that a distinctive set of urban geographies currently unfolding are marked by 'enclaved mineral-rich "patches" (Ferguson, 2006), privatised regional transport corridors/networks and urban spaces of enclosure' (ibid, 77).

In a specific regional focus, Bryceson and MacKinnon propose an understanding of the links between mining and African urbanisation as 'mineralised urbanisation.' In their definition, 'mineralised urbanisation' can be understood as the 'influence of mineral production cycles and commodity chains on urban growth and settlement patterns at local, regional and national level' (2014, 2).

Indeed, mineralised urbanisation 'encapsulates the changing national urban profile arising either from the 'direct growth' of mining settlements or the 'indirect growth' of other non-mining urban centres derived from the investment of mining profits' (ibid). These linkages, they argue, have been largely neglected in contemporary research, with extraction and urbanisation remaining largely as disparate sets of literature. They chart a grand history of extraction and urbanisation across the continent, ranging from ancient gold-trading and empires, to the racialisation of space in the colonial mining towns of South Africa. This shifts to a postcolonial trajectory, marked by new kinds of mining space, diamond smuggling, the growth of border towns, and 'Africa's new mining boom: 2000 and beyond' (ibid, 10). Driven by rising prices for metals and gold, alongside widespread liberalisation programmes, the new mining boom has set in motion unfolding relationships between mining and urbanisation. These are explored through key themes, including urban systems; mining settlements and the dynamics of growth; a sense of place in mining towns/cities; and development, welfare and poverty.

In the same volume, Gough and Yankson (2014) detail a history of mining and cities in Ghana. This begins with a discussion of the role of gold in securing the prominence of urban centres like Kumasi in the Ashanti Region and extends to the Jungle Boom of 1901-1902, in which over 400 mining companies were formed and urban regions grew along the coast. Following a period of mining decline during the era of independence, the liberalised mining sector from the 1980s onwards generated migration to mining sites. Yet, Gough and Yankson argue that the relationship between mining and urbanisation in Ghana is far from clear, observing that 'some mining settlements are primarily transitory settlements and cease to exist once the mineral has been exploited, whereas others take on additional roles and continue to thrive even if mining activities decline' (ibid, 153). They also note that miners often invest in urban areas elsewhere, outside of where mines are located. In a more general sense, they draw attention to the significance of mining in Ghana's economy writ large, such that the 'fortunes of the mining sector directly affect the strength of the Ghanaian economy, which in turn impacts on urbanisation in general' (ibid, 154).

More specifically, through an analysis of the oil city of Takoradi in Western Ghana, Chalfin exposes the on-shore, off-shore nature of oil governance, captured by the term 'terraqueous urbanism.' In this reading, 'terraqueous urbanism found in Takoradi is characterized by *cohabitation*,' whereby the oil industry 'poaches' on 'established urban spaces and structures to minimize start-up costs and ensure maximum freedom for foot-loose oil capital, evident in the use of air force personnel, runways, and waiting rooms and the navy's harbour and berths' (2018: 15). In this way, Chalfin argues for a rigorous analysis of ways in which oil and cities cohabit across land and water. More broadly, Obeng-Odoom (2009) presents an analysis of the relationship between oil and urban

development in Ghana. In his examination, understanding the oil-urbanisation nexus remains an important dynamic at the heart of generating socially just ‘oil cities.’ In a closer analysis of Sekondi-Takoradi – Ghana’s twin oil cities – he argues that ‘oil-driven urbanism, urbanity, and urbanisation create a contested arena where curses and blessings co-exist and are distributed along class lines’ (2013:230). He points to escalating land values, new housing tastes, gated communities like ‘Takoradi Oil Village,’ escalating rents, dispossession and inequality in terms of flows of land related sales, favouring wealthy indigenes, global investors and the city’s chieftain class. In an extended critique of Ghana’s oil city, Obeng-Odoom critically analyses oil’s effect on property rights, housing and labour, as well as its relationship to the urban system in Ghana more broadly. He makes a call for a ‘good city,’ founded on the redistribution of oil rents and an expanded local and national institutional capacity. Yet, perhaps the most ostensible connection between cities and extractive industries in Ghana is epitomised by the proposed ‘Petronia City’ – a 2000-acre development project, with the aim of providing the first ‘integrated’ city for West Africa’s oil, gas and mining industries. Just outside of Takoradi, Petronia City will boast an energy city, a manufacturing hub, university and golf village, together encapsulating what its proponents call the ‘New Africa.’³⁰



Image 27 - An abandoned petrol station near Ashalaja.

These readings of an ‘extractive urbanism’ provide a set of critical discussions within which an extractive resource, like sand, can be positioned with respect to the city and urbanisation processes more broadly. The authors cited here presented a multifaceted set of relationships between extraction and cities that have shifted across time and come to form in different kinds of spaces. In these readings, extractive industries have shaped the world’s largest cities and some of the most

³⁰ ‘Africa’s First Integrated City, Petronia City, Goes Global’ (ghanaweb.com, 2015). See also www.petroniacity.com.

transient of urban spaces. They have conditioned urban cultures, subjectivities and new inequalities and have given rise to grand imaginations of a new urban Africa. These are significant contributions. However, as I have suggested earlier, sand fits uneasily within this work. This literature, largely speaking, tends towards an analysis which privileges the impact of resources on cities, and the ways in which both extraction processes and the wealth flowing from extraction serves to shape cities. However, this thesis positions extraction and urbanisation as co-constitutive processes, with neither privileged for its supposed conditioning of the other. Extractive resources shape cities in particular ways, but urbanisation too shapes the extraction of resources. More broadly, I argue that the existing analyses outlined above tend to consider urbanisation *and* extractive resources, leaving much to be said about the urbanisation *of* extractive resources. Indeed, this thesis seeks to move beyond an analysis of the relationship between sand and cities and consider – at a fundamentally material level – the ways in which sand is transformed into the city itself. It is in this vein that I turn to a literature on urban political ecology as a set of potential theoretical tools for engaging with the processes through which natures – like sand – are urbanised.

URBAN POLITICAL ECOLOGY

As a diverse and growing body of work, urban political ecology (UPE) seeks to theorise the uneven ways through which nature becomes urbanised. Situating cities as the product of ongoing socio-natural processes, UPE provides ‘an integrated and relational approach that helps to untangle the interconnected economic, political, social, and ecological processes that go together to form highly uneven urban landscapes’ (Heynen, 2014:602). Central within UPE is the term ‘metabolism,’ which captures the ways in which this process plays out. Here, metabolism is understood to be a ‘dynamic process by which new sociospatial formations, intertwinings of materials, and collaborative enmeshing of social nature emerge and present themselves and are explicitly created through human labor and non-human processes simultaneously’ (Heynen, 2014:599). UPEs roots remain closely linked to Marxist urban theory, which positions cities as socio-natural entities borne out of the uneven relations of capitalism. Indeed, UPE concerns itself with the mechanisms through which social power shapes the way in which the non-human world is embroiled into the urban process and how this serves to reproduce uneven forms of power. I suggest that this theoretical lens may be a useful framework within which to position sand and the processes through which it becomes urbanised. Indeed, it offers the potential to consider the kinds of socio-natural processes that govern the urbanisation of sand and detail the forms of power that shape and are shaped by sand as it is brought into the urban realm.



Image 27 – Urban nature.

Thus far, UPE literature has delivered important analyses of the urbanisation of nature, the re-making of flows of both materials and energy and the subsequent (re)production of uneven power relations as these flows circulate through and re-constitute the urban environment (Heynen, 2016). Early landmark work included Cronon's (1991) analysis of the simultaneous production of Chicago the city and the Great West as an important agricultural hinterland, Gandy's (2002) reading of New York City as a series of struggles surrounding the reworking of nature in the city and Kaika's (2005) examination of the relationship between modernity, water and infrastructure. Heynen et al's edited volume (2006) draws together a series of important contributions to the field, observing that 'the environment of the city (both social and physical) is the result of a historical-geographical process of the urbanisation of nature (Swyngedouw and Kaika 2000)' (2006:5). More specifically, they point to the question of power as central in these processes, arguing that 'urban political ecology more explicitly recognizes that the material conditions that comprise urban environment are controlled, manipulated and serve the interests of the elite at the expense of marginalized populations (Swyngedouw 2004) (ibid). Today, a vast series of interrogation of socio-nature continue to take shape. As Ernstson and Swyngedouw write:

'[s]ince its early days, signalled by the 1996 article *The City as a Hybrid* (Swyngedouw, 1996), and ten years later, the edited volume *In the Nature of Cities* (Heynen, Kaika, and Swyngedouw 2006), UPE has matured through the proliferation of both empirical research and theoretical contributions that focus on the uneven urbanization of nature, the socio-ecological

inequalities that pattern cities, and the perplexing socionatural landscapes that capitalist urbanization produces within, between, and beyond cities' (2019:4).

Analyses range from engagements with water and electricity, to food and alcohol (Silver, 2015; Adyeman and McEntee, 2014; Lawhon, 2013). Together, these expose UPE's growing relevance in analysing a multitude of urban forms in a variety of contexts and its significance in rendering visible the possibilities for eco-political struggles across space (Heynen, 2016; Ernstson and Swyngedouw, 2019). Yet, work that closely knits together mineral extraction and the urbanisation of nature is less common. More recent work on rare earth metals brings into view some potential connections, exposing the life cycles of coltan from extraction zones, to global consumer as digital and electronic devices, and returned to cities of the global south as e-waste. As Ernstson and Swyngedouw write, 'the material underbelly of the virtual worlds of Tweets, Instagram videos, or Uber-calls, and fantasies of smart urbanism, reveals a dystopian and ruinous socio-ecological landscape' (2019:7). In fact, Ghana is one of the world's largest importers of global e-waste, hosting the planet's largest e-waste dump in Agbogbloshie, Accra (Oteng-Ababio, 2012b). Here, an expanding literature documents the circuitries of electronic waste across the globe and within the city itself (Grant and Oteng-Ababio, 2012), exposing the toxic threats posed to both people and environment (Huang et al, 2014; Caravanos, 2011; Amankwaa, 2013; Akormedi et al, 2013).

Broadly speaking, within UPE, sand has dissipated into an analytical lacuna. Indeed, I would extend Yusoff and Clark's (2017) arguments regarding the absence of the lumpen geological masses in the social sciences, to UPE more specifically. I suggest that sand's absence from current critique is a product of UPE's tendencies to stress flows, circulation and ongoing transformations of energies and matter. However, unlike water, once relatively stabilised as urban form, sand no longer circulates in obvious ways and becomes a background material for flows to pass through and around. Looking more closely to the production of the sandy skeleton of cities, and the processes through which sand is urbanised, opens-up an expanded critique, pointing specifically to the socio-natural transformations embedded in the city's ante-live.



Image 28 – Drying blocks.

A notable exception to the omission of sand from urban analyses, however, is Myers' (1999) analysis of the 'political ecology of urbanisation' in Zanzibar, which takes as its focus the construction materials industry, critiquing its production of unequal economic gains, socio-political change and environmental degradation. Here, Myers makes an early call to urbanise regional political ecology in studies of Africa, where urbanisation is a significant process shaping the unfolding of life and nature on the continent. This call reflects his later work, where he argues that it remains 'rare to find works that offer political-environmental analyses of urban issues or urban analyses of environmental issues for Africa,' noting that while this is changing, these studies remain tied to one issue, like water, or solid waste (Myers, 2016:1). In an important critique of UPE's applicability to African cities, Myers highlights other sources of socio-cultural identity, beyond class, that remain important in shaping the power relations that give rise to uneven cities, while also highlighting that the neoliberal project had a different set of material implications in African cities (ibid). In doing so, he argues that 'African urban environmental consciousness is not a linear unified concept readily translatable into Marxist language or post-structuralist thinking' (ibid, 14). In this vein, he makes the point that by bringing 'a critical eye to the historical and cultural dimensions of landscape change...the long and deep bench of more rurally based political-ecology research from Africa may offer a way forward' for a UPE situated in African cities (ibid, 16, 15). Here, he refers to numerous classical works that include studies of landscape change, deforestation, soil erosion and conservation. Specifically, he argues that by failing to bring UPE work into closer conversations with more traditional rural political ecology in Africa, we miss the 'opportunity of highlighting both the specific spatiality of peri-urban contexts in

between the rural and urban settings and the inextricability of rural and urban political-ecological dynamics in the first place' (ibid, 16). Given that sand is extracted from the edges of the city, bringing these canons of work together is crucial in building an analysis that reflects this specific spatiality and thus the socio-natural un/making of the shifting peri-urban.

Myers' work dovetails with other recent critiques of UPE. Indeed, Lawhon et al. (2014) highlight the limited sites at which theoretical insights have been produced, in turn, making a call to provincialise UPE. Specifically, they argue that African urbanist literature and further research in African cities has much to offer. By expanding notions of power beyond those derived from Marxist critiques of capital accumulation (as per early UPE), existing work in African cities, beyond UPE, has exposed more diffuse forms of power, driven by a range of historical impulses, as well as intersections of race, gender and other identities. Looking to existing work, they suggest that analyses in African cities have highlighted fractious forms of governing and social action, exposing the variegated sets of 'logics, intentionality and assemblages' of state and non-state actors which shape urban environments (Lawhon et al, 2014:507). They warn that analyses which begin with material infrastructure may be ill-fitted to settings where large-scale interconnected modernist infrastructure, like sewage systems, have not taken precedence in the urban form. This may be particularly true for some/parts of African cities and thus they suggest we re-attune our readings of infrastructure as a set of social relations (Simone, 2004). In their concluding remarks, they urge us to pursue ethnographic work which attends to the situated processes of socio-natural transformations in the city, through which more nuanced understandings within UPE can come to the fore.

To conclude, UPE offers much in situating the urbanisation of sand as a socio-natural process, rooted in uneven forms of power which shape and are subsequently re-constituted through this process. Yet the absence of sand or construction material more broadly in its critique of urban nature points to a generalised limit within this body of work. UPE has tended to avoid an engagement with the ante-lives of urban form - or the socio-natural transformations which give rise to the material skeleton of cities through which people and energies subsequently flow. Moreover, UPE has generated its theoretical scaffolding from the perspective of a historically-specific set of western cities and in deep conversation with the Marxist analysis, much of which fails to translate easily to cities of the Global South.

I argue that an analysis of sand's urbanisation, from the vantage point of a growing West African city, serves to contribute to UPE in important ways. Indeed, building an analysis in this vein contributes to our understanding of nature's urbanisation by detailing more specifically the geosocial transformations embedded in the material making of the city, turning here to the ante-lives of urban

form. Meanwhile, such an analysis generates space for grappling with these processes through a reading which looks, where necessary, beyond the Marxist orientations of classical UPE and instead through grounded practices of city-making and both historical and contemporary forms of situated-power. This, I argue, provides significant scope for expanding the capacity of UPE in analysing cities of both the global south *and* the global north – drawing cities near and far into productive dialogue.

CONCLUSION

This chapter has sought to do two things: position the urbanisation of sand in an existing literature and expose the potential for expanding our existing understanding of both extractive and urban processes through an analysis of sand's urbanisation. These are theoretical manoeuvres that together I position as *unearthing a city of sand*. This chapter began by detailing the historical and contemporary contours of sand demand in Accra, providing an important context for us to situate the urbanisation of sand in the present unfolding of the city. This was followed by a critique of existing social science research, which has largely omitted sand from its remit of work. Indeed, despite sand's universality across the planet, I argue that little work has engaged with this material, a product of the terms through which the non-human world has been brought into the social sciences (Yusoff and Clark, 2017). Yet, as discussed, geological strata have shaped a significant element of the unfolding of human life and remain important underlying phenomena through which to understand facets of a historical and contemporary Ghana's. I suggested that the extraction of sand and its subsequent urbanisation presents an important extension to this geosocial reading, while departing from an engagement with prized minerals like gold serves to broaden the scope of this analysis.

The image has been redacted for copyright reasons.

Image 29 - Performing duties of the mate.

I subsequently turned to three sets of literatures through which I sought to situate the urbanisation of sand. I argue that sand fits uneasily within and across these literatures; however, an analysis of the urbanisation of sand presents significant opportunities to expand the theoretical dimensions of these existing contributions. The first dealt with extractive industries more broadly and in Ghana specifically, outlining the discourses through which extraction has been theorised. As both blessing, curse and an outcome of political-economic relations, this literature discussed the production of specific forms of geographies, labour relations and ecological implications embedded in extractive processes. A vast literature on the extractive industries provides a good foundation for understanding the political economic processes of extraction and how these have unfolded in Ghana more specifically. Yet, I argued this literature remains tied to particular kinds of materials: gold,

diamonds and oil for example, which I suggested may be a product of their transnational geographies, the political-economic parameters of an extractive industries literature and the privileging of particular kinds of data. Indeed, I suggested that sand's tendency to be extracted and consumed within the nation state renders it less visible to traditional kinds of political economic analysis of extractive industries, while a generalised anti-urban bias in traditional Africanist studies may also explain why the extraction of sand, and its subsequent consumption within the city, has received limited attention.

Seeking to bring the conversation closer to urban analysis, I detail a literature on extractive urbanism, which elucidates the kinds of relationships engendered between extractive and urban processes. While offering significant insight into the historical and contemporary dimensions of these processes, I argue that these analyses, though not exclusively, tend to privilege the effects of mineral extraction *on* cities, as opposed to detailing the co-constitution of extractive and urbanisation processes. Moreover, they remain limited in their ability to capture the kinds of intrinsic material transformations that the urbanisation *of* sand presents. With these critiques in mind, I turn to UPE, as an important theoretical foundation through which to politicise the material transformations undergirding the urbanisation of nature. Despite offering an important language and theoretical lens, UPE remains limited by its privileging of metabolic flows, like water and electricity, which, unlike sand, continue to circulate in the city, rendering sand largely invisible in UPE literature, an omission which limits our understanding of a fundamental material transformation embedded in urbanisation. Meanwhile, as Myers (2016) and Lawhon et al (2014) have pointed out, the forms of power assumed within classical UPE frameworks may fail to translate beyond the western cities in which they were developed and thus offer limited scope for grappling with the situated forms of power that remain significant in theorising the urbanisation of nature in cities like Accra.

Together, the literature presented here offers an important basis for pursuing an analysis of the urbanisation of sand. Sand speaks to existing work on geological strata, colonial histories, extractive industries, mineralised urbanisation and UPE. Yet, sand also disturbs some of the underlying assumptions and biases within this work, as well as exposing a significant lacuna across existing social science research. More specifically, an analysis of sand's urbanisation extends our reading of extractive practices beyond prized materials, like gold and oil, exposing domestic geographies of extraction and consumption that undergird contemporary urban processes across the planet. Moreover, an analysis of the urbanisation of sand offers significant opportunity to strengthen an understanding of the relationships between urbanisation and extraction as co-constitutive processes, in turn rendering visible the material links between resources and cities and the ways in which these take form within particular places. Finally, detailing the ways in which sand is urbanised serves to

extend theoretical engagement with the city as a deeply political socio-natural process, through the lens of an integral, yet theoretically marginal material. Through doing so, we are thus able to contribute to further detailing the fundamental links between nature and the built environment - meanwhile responding to important calls to provincialise UPE and expose the situated formations of past and present power relations that shape the processes through which natures are urbanised.

Thus, responding to the realities of sand's significance in Accra, and indeed, the need to shift the coordinates from locations which dominate the sand story, as well as extending an analysis of Ghana's geosocial formations, the urbanisation of sand presents an important opportunity to expand our understanding of both urbanisation and extractive processes in meaningful ways. Indeed, by stretching the contours of this existing work, as well as building links across this literature, an analysis of the urbanisation of sand has much to offer in expanding an understanding of the contemporary unfolding of both extractive and urban worlds across the planet.

THE SHIFTING SANDPIT: EXTRACTING SAND IN AND FOR A POSTCOLONIAL CITY

THE SHIFTING SANDPIT

This chapter details the socio-natural politics through which sand is extracted from the shifting sandpit. The chapter opens with an ethnographic narrative of the shifting contours of sandpit and city, which interprets the city as a set of socio-natural transformations. Seeking to extend this reading of the city as a socio-natural process, I turn to a 'geosocial' analysis (Yusoff and Clark, 2017) of the extraction of sand more specifically, exposing the 'deep time of the city's socionatural evolution' (Mendelsohn, 2018: 456). By tracking the dynamics of the shifting sandpit, I expose its material and conceptual contours as both 'a space in the making and a form of theory making (Caldeira, 2009)' (Roy, 2011:232). In this respect, the chapter presents a geo-history of Accra, detailing the ways in which a socio-natural, postcolonial politics of land shapes the location and practices of sand's extraction at the city's edges. Indeed, I show that the land from which sand is extracted is geologically uneven, ecologically fluxing and politically contested. It is at this conjuncture of land that sand is unearthed to build the city yet to come. From here, the chapter reveals the mechanisms through which the extraction of sand serves to re-present, re-make and reconfigure this politics. I argue that an analysis of sand's extraction reveals to us the ways in which a significant element of material Accra is unearthed through a specifically postcolonial, socio-natural politics. Yet, I argue that while governed by underlying geological deposits, shifting ecological conditions and a postcolonial politics of land, the sandpit remains a negotiated space – a negotiation reproduced as the sandpit shifts across the city's moving edges. It is to this end that I situate the shifting sandpit as an 'aperture, an opening, a possibility' – or indeed, its own kind of postcolonial hole (De Boeck and Baloji, 2017:151).

THE SHIFTING CONTOURS OF SANDPIT AND CITY

I moved with the tipper drivers on a regular basis. We collected sand from pits near Ashalaja and distributed it between block factories, construction sites or back to the tipper station from where it would be later sold. Not surprisingly, in these movements, the sandpit became an important space from which to make sense of the relationship between the city and sand. Broadly speaking, the sandpit is the space from which sand is extracted. It was a name that was used among those working in the industry, although, often it would be shortened to 'pit.' For example, if we called the operator of the sandpit to seek his whereabouts, he would reply, '*Me wo pit*' – meaning, 'I'm in the pit.' The sandpit is operated by a contractor who is responsible for acquiring the land, transporting the machinery to the site, bulldozing the land to unearth the sand and moving the sand from earth to

truck. Though varying in size, sandpits from which sand was unearthed tended to be modest in scale, approximately the size of a football pitch. Within a few days, or even within the space of a day, the sand which lay beneath the earth would be exhausted and the contractor who organised the acquisition of land and the extraction of sand would be forced to move elsewhere. Therefore, on most occasions, we would be directed to a different sandpit, sometimes with the recently exhausted sandpit, now lying flat and bare, within close view. Thus, the sandpit was an ephemeral space and required continuous effort to locate its coordinates. Even with the planting of a flag at the roadside, which symbolised the presence of sand winning in the area, the shifting sandpit demanded specific kinds of mobile economies, particularly groups of men on motorbikes who sat at the roadside and directed tippers to the sand.



Image 30 - Flag planted at the roadside, indicating the location of sandpits.

This mobility also lent itself to a significant narrative of the shifting contours of both sandpit and city. Indeed, as we gathered sand from holes punctured in the earth's surface and redistributed material across the city-region, the tippers' historico-spatial narratives of both sand and city gained traction: 'there was sand here, we used to collect it here. But now the place is becoming developed. This whole place used to be sand, but now it's the city.' Drifting back towards the city, with Amasaman and Pokuase in our view, Francis would gesture outwards, 'we have dug sand around here already. Back then, we have dug at all of these places.' Through our back-and-forths between city and sand, sand and city, the tipper drivers repeatedly commanded a spatial history of Accra, recalling how it had grown and the rapid rate at which it had done so. Spreading from places close to the main road like Amasaman and Pokuase, the unearthing of sand and the unfolding of the city had together, snaked outwards, stretching towards places like Ashalaja, Hobor and beyond. By evoking the historical coordinates of the sand, they relayed an imagery of the sand and the city moving together, with the sandpit situated as an urban frontier in this geography.

The narrative of the shifting contours of both sand and city was not isolated to the tipper drivers. Indeed, these stories of sand and city would solidify in the renditions of Mr Frimpong – the local politician who featured in the opening paragraphs of the thesis. Located between the rural edges of the district and the core city, Mr Frimpong described Ashalaja as a 'developing area.' Yet, in the not so distant past, Ashalaja had been a place where sand was extracted. The politician explained,

'sand winning is a normal thing that happens before an area has been developed. You have to come to the outskirts to get the sand. It was around 2010 when sand winning came here. There were some places that were not yet developed and it was here where they were winning the sand, and that was part of Ashalaja. Places that were not developed, that's where they did that.'

But sand winning is 'finished' in Ashalaja and has rather shifted further north towards Hobor and Obom. We discussed the shifting locations of both the sandpit and the city and the politician explained, 'the sand winning is always in Ga rural. Ga rural is a vast land and that place is not developed. That is where the sand winning is.' As the sandpit shifted, so did the city and as it seemed, Ashalaja's history lay somewhere on the recent coordinates of city and sand.

This geography also surfaced in conversations with officials at the Minerals Commission. A member

of the Task Force³¹ recited, 'the sand used to be dug at Amasaman, but it shifted to Ashalaja and now Hobor and places in the Eastern Region.' He continued, 'infrastructure is fast developing. Towns are growing very quickly...villages are expanding. Wherever they mine, they build. And now, sand winning activities are far from where they used to be.' Another member added, 'development has pushed the sand further. Within two years, it's travelled 10km from its original source.' Similarly, the Commission's researcher reiterated, 'sand winning to supply all over Accra happens at the edges of the city. Areas around Pokuase, all of that was sand, but now it's urban. The sand is always at the edges of the city.'



Image 31 - Stacks of building blocks next to a mound of sand, on the road to Hobor.

This historical geography of Accra would reign supreme in conversations with those who worked with the sand.. The chief operator of *Piam* with whom I would become acquainted, Mr Osei, recalled the history of sandpit and city. 'We've been winning sand around Hobor area for about 5 years now and finished taking sand at Ashalaja around 3-4 years ago. We've moved back.' Gesturing outwards, he said, 'we were just working around the roadside here yesterday.' In a longer historical narrative, he told me that he'd

³¹ The Task Force is a small group of employees at the Minerals Commission responsible for researching activities of sand winners in Accra and working with the police and traditional authority to implement best practice.

‘been in the industry for about 20 years. We were first digging sand around Amasaman, then the Doblo areas and then Ashalaja, and now we are spreading out this way. This place we are on now is under development too, it has been sold to an estate developer. Where sand deposits are, we will go...When I was a young boy, we were even getting sand, stones and gravels from Asylum Down and New Town.’

Here, emerging in our conversations on the sand frontier, were the same meta-narratives of Accra’s expansion that had reigned supreme as I moved on the road with the tippers. In this way, across the multiple spaces of my field site, sand became a significant vehicle of eliciting urban memory (Agard-Jones, 2012:339).

However, it was not only recollections of Accra’s history that emerged on the sand frontier, but also renditions of Accra’s future. In a sandpit not too far from where we had first met, Mr Osei gestured to the main road and the electricity transmission wires running above our heads, ‘the place we are in now will be a city, within, let’s say 10 years.’ In the same way that the shifting sandpits had been used to talk about an urban past, the sandpits of the present also exhibited a narrative of an urban future. History had shown that the shifting sandpit and the shifting of city had manifested in parallel. Indeed, for those who traversed these sandscapes, places where sand had once been unearthed had now become the city itself. Thus, the past was conjured up as a way to affirm a future yet to come. Sand was a way of talking time and space (Zee, 2015). It offered a way of remembering and a way of prophesizing Accra’s future urban transformations. In this way, ‘remembering through sand...also constitute[d] a foretelling’ (Zee, 2015:216) where today’s sandpit was cast as tomorrow’s city.

Important insights can be gleaned from this ethnographic narrative. The sandpit and the city were imagined to have shifted in parallel. This made sense, given that the sandpit supplied the city with sand which it needed to grow materially. As sand was unearthed and used, the sandpit was required to shift farther from the historical core city. Meanwhile, the city itself was expanding, effectively chasing the sandpit outwards. Thus, the sandpit signified the ‘city yet to come’ (Simone, 2004) in a double sense. It was imagined as both the material of *and* the host of that city yet to come, albeit set across different times. Thus, in many ways, the shifting sandpit was an important narrative device for my interlocutors to express a significant dynamic of city growth. It rendered visible the materiality of the city and facilitated discussion of the shifting geographies of the city more broadly. However, these narratives of the mobile coordinates of both sand and city also exhibited a powerful imagery of the city as a socio-natural process, akin to that theorised within urban political ecology (UPE). In these renditions, sand was extracted from the edges of the city. The sandpit was exhausted and its ephemeral coordinates shifted farther from the city’s core. As sand re-embedded itself in the urban

process, it densified the city's shifting centres and stretched its edges. Nature was urbanised and the sandpit and the city simultaneously shifted. Together, these interpretations reflect Swyngedouw's observation that 'the political-ecological history of any city can be written from the perspective of the need to urbanize and domesticate nature and the parallel necessity to push the ecological frontier outward as the city expanded' (2006:115). In this chapter, I seek to supplement this broad geographical imagery with a detailed analysis of the extraction process more specifically, thus shedding light on the contested socio-natural processes through which sand is first harvested from the earth. In doing so, I build a socio-natural reading of the city through a 'geosocial analysis' (Yusoff and Clark, 2017), exposing the 'deep time of the city's socionatural evolution' (Mendelsohn, 2018: 456).

THE GEOSOCIAL SANDPIT

In a reading of the Lagosian urban coast, Mendelsohn (2018) borrows from Yusoff and Clark (2017), deploying the notion of 'geosocial formations' as a 'minimal staging ground for earth science-social science encounters' (2017, 456). Here, Mendelsohn analyses the coevolution of human and geologic forces in the context of Lagos's unique ecology and historical trajectory, detailing a timely account of land management, 'dramatised' most vividly by the ongoing developments of the land reclamation-cum-real estate dynamic at Eko Atlantic. Highlighting a dearth of conceptual vocabulary to capture the ways in which 'sand and related coastal geomorphological processes interact with the city's political and imaginative trajectories as well as its historical legacies' (ibid. 457), he brings to view a 'geosocial' reading of the urban coast. Staging sand as 'the sedimentary medium that forms the most intimate link between humans and the urban geologies that we create,' he argues that,

'[a] geosocial reading demonstrates that the circulations that often characterize this post-colonial megacity – as a hub of maritime trade and colonial arrival, of the export and in some cases the return of human slaves, of Pan African aspiration, and of visual-cultural and literary production and hybridity – should be thought alongside another set of circulations and flows: of the ground itself' (ibid 457).

Mendelsohn's reading offers much for thinking about the shifting sandpit in Greater Accra. Indeed, his application of a geosocial reading brings to life the urban form as a set of deeply political socio-geological relations, paying respect to the city and its constituent materials as embedded within the 'deep time of the city's socionatural evolution' (ibid. 456). Here, Mendelsohn brings to view sand as an active material in the remaking of the socio-natural politics of the city. Specifically, sand is situated as a medium endowed with the capacity to remake the boundaries between land and water as well as emerge as land itself. Yet sand's position is also deeply fragile and subject to the forces of nature

as much as to forces of human manipulation. It is these processes of coevolution that help us understand the continuous remaking of Lagos's urban coast, including recent developments like Eko Atlantic. Critically, Mendelsohn exposes the ways in which the city's manipulation of sand to reclaim the urban coast is implemented through an often violent, antipoor and exclusionary mode of rule (ibid. 456). This chapter extends Mendelsohn's geosocial reading to unearth the socio-natural politics through which sand is unearthed from land in Greater Accra. While Mendelsohn observes the capacity of sand to un/make land, this chapter looks to the ways in which sand is extracted *from* land. At the centre of both stories, however, is sand and an analysis of its role in the contested production of the city as a socio-natural process.

In the following geosocial reading of the shifting sandpit, I show that the land from which sand is extracted is geologically uneven, ecologically anxious and implicated in a postcolonial politics of disputed ownership and contested access. I show that while this socio-natural politics shapes the process of sand extraction, the unearthing of sand simultaneously re-works this politics. Drawing upon ethnographic fieldwork at sandpits, interviews at government bodies and secondary sources, this chapter argues that the shifting sandpit, as the place where sand surfaces, emerges as a conjuncture where the socio-natural politics of land is re-made. The remainder of the chapter, then, will turn to the space of the sandpit, not to track its shifting coordinates, but rather to unearth its grounded politics.



Image 31 - Entrance to a sandpit.

UNEVEN NATURES

From Awoshie Junction, sand seemed inevitable. Throughout the day, trucks passed by, loaded with the golden grains from various parts of Greater Accra or neighbouring regions. Sand slipped beneath the tarpaulin that stretched across the truck, generously dusting the roads with the material. Delivering sand to block factories or construction sites, the trucks transported the humble commodity towards its destiny as new urban form. Some trucks returned from the sandpits, bringing sand to the station, where it was unloaded, sold and redistributed. Here, sand spilled out over the edges of the road, where it was periodically caught in a light gust of wind, distributing the grains across the junction. Sand was necessary to build the city. It constituted a good bulk of the city's built form. But this necessity did not mean sand was inevitable. Indeed, from the sandpit, the unearthing of sand emerged not so much as an inevitability but rather as a negotiated unfolding of socio-natural alliances.

As a nation, Ghana's geology has been extensively analysed. This geology, however, is uneven. Unlike the Ashanti Region, which is endowed with prized minerals and cash crops like cocoa, Greater Accra is devoid of any significant minerals. In the past, lacking the riches of their regional neighbours, the Ga relied upon the lagoons to produce salt and fish and performed the lucrative role of middlemen, buying and selling valuable commodities, like gold and cocoa, to and from African and European traders (Clottey, 2015). Today, the economy of contemporary Accra has diversified extensively. Clusters of international finance institutions, creative industries and complex informal economies give life to the metropolis. Yet, despite the absence of prized rocks, the geology of Greater Accra itself retains a role in the wider region's economy (Tagoe, 2005). In Greater Accra, mining, including sand mining, remains an important industrial activity in 'functional rural areas:' areas which sustain livelihoods of over 300,000 people and are expected to more than double by 2037 (Greater Accra Regional Spatial Development Framework, 2017). Yet Greater Accra itself is geologically uneven, endowing specific regions with higher quality sand in abundance, which in turn shapes the geographical locations of sandpits.

On our first meeting, not far from a cluster of villages at a road junction, I joined Mr Osei as he embedded himself in the process of unearthing sand. As reels of sand surfaced at the pit, we discussed the quality of the sand. It was medium sand, he explained. Medium sand could be used for building blocks and if there were reels of smoother, whiter sand, those grains could be used for plastering. In our discussions, Mr Osei confirmed the geological knowledge of Greater Accra that both the tipper drivers and members of the Minerals Commission had shared with me. This knowledge pertained to the uneven quality of sand deposits in the region. Indeed, areas around Amasaman and Ashalaja were endowed with high quality sand, in reasonably deep deposits. As a

member of the Minerals Commission explained, the sand on *this* side of Greater Accra was offered up in thicker deposits over a wider area, compared to ‘Dodowa side,’ where ‘the nice sand is [only] in pockets’ and where ‘there is more gravel than sand.’ Together, their accounts reflected the geological realities of the region, where, broadly speaking, the west of the region hosts sandy, yellow and pale soils, compared to the east, where soil types tend toward sand, clay, humus and rocks.

The western region of Greater Accra then, boasts significant deposits of desired sand. Formerly grouped together as the Ga District, this region includes several separate districts that span north, west and north-west from the AMA to the boundaries of the Greater Accra region. In the Ga South municipality more specifically, where vast quantities of sand are unearthed,

‘the main type of soil in this area is the Coastal Savannah Ochrosols. The coastal sands are pale yellow in colour and without humus or organic matter. On the Akwapim range, the soils are mainly pale and sandy with brushy quartzite occurring to the surface in most places’ (Ghana Statistical Service, 2014:1).

These areas have become important sources of sand supply for the city. Following the banning of coastal sand extraction, the exploration of inland pit sand increased considerably. Within this context, over the decades, ‘it was established that sand from the Ga Districts could be classified as one of the best’ (Tagoe, 2005:23). Indeed, as Tagoe (2005) points out, in 2002, the Development Plan of the former Ga District identified this trend, noting that the previous decades had witnessed the western region of Greater Accra serving as the source of construction materials for growing urban districts (ibid).



Image 32 - Edges of a sandpit.

The location of the Ga districts was significant. Not only were these districts endowed with desirable sand, but they also occupied the boundaries, albeit sometimes blurred, between densely settled urban Accra and more rurally configured regions. It was in these regions that a substantial degree of construction was taking place, prompting increasing demand for nearby sand. As places both where sand is unearthed and where the city's limits are stretching, Western regions of Greater Accra have undergone significant transformation. Indeed, Stow et al. argue that 'by far the greatest amount of land area of New Built occurred in suburban and peri-urban areas of Accra and particularly in the Ga district' (2016:36).³² Indeed, as GSMA's Director announced, 'this area is the most heavily won for sand. It began becoming more intense around the 2000s onwards, when development increased and so did the demand for sand.' Here, then, sand and city emerged together. In this geosocial reading, the shifting sandpit is not inevitable. While the city relies upon this prosaic material for its very form, it is not omnipresent in quantities and qualities desired. Yet, the presence of sand in Ga regions does not render the shifting sandpit inevitable. Rather, the demand for sand, generated by a nearby expanding built form, ensured that the sandpit continued to shift. Coevolving, the shifting sandpit and the city's peripheries moved across space, relying upon one another for their formation.



Image 33 - Pacing a sandpit.

Yet, even within a singular pit, sand was not omnipresent, particularly smooth sand which could be used for both building and plastering. Indeed, workers at *Piam* had mastered the capacity to read meaning into the earth beneath them and guide machines to extract the most valuable grains. In one

³² According to the same study, in 2000, 18.2% of this land was built, compared to 2010 which saw 35.1% of Ga land built - an absolute built change of 143.1km².

such pit stood Mr Charway, who called forth the bulldozer in different directions. He explained, 'we are following the sand, where it meanders. You can see, here it is clay,' as he pointed to the edge of the pit. 'But here, there is sand. So we have to follow the meanders of the sand.' Following Charway's earthly interpretations, the bulldozer regurgitated the land, revealing ripples of sand beneath, ready to be loaded onto trucks that anxiously awaited to transport the grains to new urban destinies. The presence of sand could not guarantee its extraction, however. If the ground was soft, or if it had rained, the machines were at risk of malfunctioning. Indeed, on one particular occasion, I joined the operator of the pay loader, moving sand from pit to truck. The machine hesitantly moved across the land, gathering sand and manoeuvring into a position to unload the material. The mate stood upon the sand in the truck, guiding us and moving out of the way when necessary. As the operator gathered the sand, I noticed that the volume of sand he collected varied. Sometimes he filled the front bucket to its edges, at other times, much of the bucket remained empty. As he tentatively moved around the pit, he explained 'the sand is good, but the ground is soft and the machine is sinking, so you have to move around.' Soon after returning to pit level, Mr Osei announced we were leaving the pit. 'There is sand,' he said, but reiterating what the operator had explained to me, 'the ground is not good for our machines, so we will move to the next site.'

The risks associated with machines sinking on soft ground were particularly problematic in low-lying sandpits in the rainy season. These risks demanded particular kinds of industry practice. High season for sand extraction, block building and general construction were the months of limited rainfall: from October to March. During this timeframe, sand winners would unearth material from sandpits – or indeed, parts of sandpits – at a low-lying level. At this time, low-lying land was dry and the machines could access land that would otherwise remain water-clogged during the rainy season. In the rainy seasons, *Piam* would access land at higher topographies, where land was less likely to flood. At times, this engagement with land was premeditated. At other times, like that above, we would move from a sandpit mid-extraction, because 'the machines [were] sinking.' Across the year, we would leave and return to the same sandpits, accessing parts of the pit otherwise inaccessible in the rainy season. This meant that *Piam* had a portfolio of sandpits that they would move between, depending on the season, weather and topography of their working sandpits. The lack of uniformity was also conducive to business, I would learn. Broadly speaking, there is a preference for soft, white, sand. The motives provided varied, but Mr Osei reasoned that when you mixed the soft sand with cement, the quality is higher than medium/rough sand. At high sand winning seasons, white sand was both demanded and available. During rainy seasons, the overall supply of sand was reduced and it provided an opportunity for *Piam* to sell the less desirable sand at the same price. Thus, in rainy seasons, they would return to sandpits and extract the darker, medium sand that was not sold at high season. This seasonality bespeaks mining practices more broadly. Captured through the notion of 'mining

temporalities,' D'Angelo and Pjipers, point to the 'complex mesh of...durations, rhythms and cycles – with different velocities, intensities and extensions,' which together give rise to time-spaces of mining (2018:215). Through shifting with the sandpit, I would learn that the mining temporalities of sand required knowledge beyond Greater Accra's geological constitution as a static landscape. Rather, Mr Osei's knowledge of the constellation of contingent interactions between sand, clay, topography, weather, seasons, markets and machines, emerged as critical to the manifestation of the shifting sandpit.

Thus, together, the shifting sandpit can be read as the contested surfacing of the city's deep time. Geological formations produced uneven natures that endowed some regions with prized rocks, others with prosaic rocks and some with no rocks at all. More than an inevitable space, generated simply by the demands of the city, a geosocial reading helps us begin to understand the shifting sandpit as a coevolution of forces: an alliance of nature, time, social systems, knowledge and technology. In the following section, I extend this reading, detailing the more specific ways in which a postcolonial politics of land shapes the unearthing of sand.

SECURING LAND AND SECURING SAND

At present, sand is governed by the 1992 Constitution, which stipulates that every mineral in its natural state is vested in the President on behalf of, and in trust for the people of Ghana. Mineral rights are granted to private parties, endowing them with rights to mine the minerals in the ground, thus distinguishing between mineral rights and 'surface rights' to the land. According to the *Minerals and Mining Act 2006*, sand – alongside basalt, clay, granite, limestone, marble and others – is classified as an industrial mineral, subjecting it to a specific set of governing rules. The law requires that sand mining operators acquire a restricted license granted by the Minerals Commission, effective for up to 15 years. Unlike other minerals, where the state actively promotes foreign investment, non-citizens cannot be granted a restricted reconnaissance licence, restricted prospecting licence or restricted mining lease for industrial minerals. In this respect, the Minister is endowed with the power to cancel an industrial mineral right if it is found that the holder has entered into an arrangement with a non-citizen. However, a non-citizen may apply for an industrial mineral right provided that a minimum of US\$10 million is invested in the mineral operations. The owner or occupier of land is granted a special right with regards to industrial minerals for non-commercial purposes, whereby the owner, occupier or holder is given rights to prospect and mine solely for building, road construction or agricultural purposes on the land, 'so long as the exercise of the right is not inconsistent with or detrimental to the right of another person holding a mineral right in respect of the land' (*Minerals and Mining Act, 2006*: 44, [80]). The provisions that refer to mineral rights also apply to industrial minerals, including obligations, mineral right fees, royalties and

compensation. Sand winning is governed more specifically by local bye-laws under the *Local Governance Act, 2016*. In the GSMA where much of my research took place, bye-laws regulate the process of obtaining a specific permit from the district, issuing fines for winning from an unauthorized pit and monitoring regulations pertaining to land reclamation. The *Minerals and Mining Act* stipulates that a holder of a mineral right must pay an annual ground rent as prescribed, to be made to the owner of the land or successors and assigns of the owner. Where stool land is concerned, ground rent must be paid to the Office of the Administrator of Stool Lands. In practice, given that sand mining involves frequent movement between sandpits and thus the occupation of land over short time spans, a 'land fee' is paid to the owner of the land, which is directly dependent on the volume of sand extracted from the land.

At any given moment, *Piam* had a portfolio of around 6-10 sites which had been acquired from various landowners for the purposes of sand winning. These may already be part-mined, or indeed awaiting the first bulldozer. Either way, the portfolio provided a pipeline of sand deposits which *Piam* could shift between and was an important element in extracting a reasonably seamless supply of sand. Maintaining this portfolio required ongoing research to acquire and secure land nearby and this work was performed by a few employees who moved by motorbike throughout the region. These researchers – as they were called – were tasked with locating and securing access to nearby sand deposits, which involved touring the region and prospecting land. A researcher explained to me that they are guided by the topography of the land, looking for sand 'in the hilly areas,' where 'there are particular kinds of shrubs that grow on there, so you can guess where the sand is. Then you take a shovel and dig to see.' At times, the researchers would investigate land immediately adjacent to an active sandpit, piercing the earth with a small hole, removing a shovel of sand and presenting it to Mr Osei, who ran the sand through his palms to assess its quality. At any site, they would dig minor holes at various points of the plot, investigating the quality and potential quantity of sand present. If there was sand, the research explained, you can approach the Chief, the individual family or the state developers – depending on who owned the land – and make an arrangement. He also explained that families, Chiefs and estate developers may approach them and ask them to investigate whether sand was present on their land, which they were willing to sell. Thus, acquiring land required research to decipher who the owner of the land was and where the boundaries of that specific plot lay. Following this initial research, a prospecting period is set in motion. The prospecting of land involves a 500 cedis 'bush allowance' paid to the owner of the land to show you the plot's boundaries. Subsequently, an 'acceptance fee' is paid, which varies according to the size of the land, but is likely between 500-1000 cedis. A goat/ram and two bottles of drink are presented in addition to these first fees. The bulk of the fee, however, is captured in the 'land fee,' which will vary depending on the volume of the sand deposit. The fee is calculated based on the number of trucks that leave the

sandpit with a load of sand, however, some families, I was told, demanded an advance payment. The 'per truck' fee is negotiated, but likely between 30-50 cedis per truck. This is set within a context where the price of sand purchased from the sandpit stabilised at 200 cedis during the greater part of my fieldwork, but this had increased to 220 cedis by December 2018 (15 months later).



Image 34 - A researcher's motorbike.

The process of acquiring land, Mr Osei explained, was difficult. Despite land being acquired temporarily for the sole purpose of the extraction of sand and then returned to its owner, the high number of land disputes in the region meant that *Piam* was presented with the difficult task of acquiring land without contest. As Mr Osei lamented,

'there are litigations on some lands. If there is a dispute, you have to stop, because some land litigations can take years. So if you invest money, you won't get it back until much later. You'll be in bad debt. The disputes are increasing, because people are claiming each other's lands. People are encroaching on land: some are boundary issues, some are ownership issues.'

This reflected the consensus in academic debate, politics and the everyday lives of inhabitants that land is highly contested. This contestation, I argue, is rooted, in part, in a history of extraction more broadly – a history to which I now turn.

GEOHISTORY

At the turn of the twentieth century, the discovery of gold and mineral resources, the lucrative potential of the cocoa industry in neighbouring Asante region, and the demand for land for colonial

state building in the newly designated capital of Accra, initiated a surge in the value of land across the Gold Coast (Firmin-Sellers, 1996). Consequently, land was being transferred between chiefs, speculators and investors in a fashion that prompted the British to seek order, fearing that the uncontrolled nature of such transactions would deter 'legitimate' investors from the colony (Firmin-Sellers, 1996; Ilegbune, 1976). Geological reports had forecast that £40 million worth of gold could be extracted over the course of ten years – a venture they argued could only be secured through the investment of huge amounts of foreign capital (Nti, 2012). Keen to influence the concession granting process in this lucrative economy, the British proposed the Crown Lands Ordinance of 1894 and the Lands Bill of 1897, which vested all 'waste lands, forest lands, and mineral lands in the Queen' (Firmin-Sellers, 1996:31). In response, an urban elite and traditional authority joined forces to form the Aboriginal Rights Protection Society (ARPS), resisting the Bill on the grounds that all land was invested in the lineages of the stools, skins or families, and thus was not 'vacant' (Clottey, 2015; Nti, 2012).

As set out in the introduction, Accra has traditionally been occupied by the Ga-Dangme people, the state of which prior to colonial rule existed as a 'loose federation of independent republics, all united in military alliance' (Firmin-Sellers, 1996:37).³³ In precolonial Accra, the Ga state was governed by a set of institutions, whose relative balance of power was an important means of maintaining legitimate authority. In the years preceding colonial rule, the *mantsemei* – or town fathers, (sing. *mantse*) – of each town or quarter, acted as the 'leading public office-holders,' the symbolic representation of which was a stool (*sei*). The Ga stool, however, as Clottey observes, 'serves more as a symbol of military power which implies lesser use of real political power' (2015:46). While succession was hereditary:

'the *mantse* is chosen by elders of the town or quarter and requires the approval of the citizens (*manbii*)...Each Ga town has royal families which produces chiefs on a rotational basis. Apart from Ga Mashie which provides the Ga Mantse and has chiefs for each division and quarter, Osu, La, Nungua, Tema and Kpone have a *mankralo* a-piece who supports each town's *mantse*' (Clottey, 2015:40).

Wulomei (sing. *wulomo*), are the priestly groups of the Ga state. Their duties 'are not only to officiate at public worship and give the god its daily or weekly libations, but to interpret to the people the wishes of the god, and his is the final voice in any controversy about right or wrong' (Field, 1937:7

³³ As a non-homogenous group of people, the modern Ga state peaked in the mid sixteenth century under the rule of King Okaikoi, following which a more fractious system of sociality took hold (Clottey, 2015). See introductory chapter for more in depth discussion of the formation of the Ga state and Accra.

quoted in Clottey, 2015:41). Their political authority is deeply embedded in the ecologies of the Ga state – an ecology which powerfully shapes traditional Ga beliefs and customs. Central in this ecology are the lagoons. As I have already observed, with high salinity, the lagoons provide the Ga with abundant salt, which formed a central tenet of commercial wealth (Parker, 2000). Together with hills and other water bodies, the lagoons are significant in the socio-cultural, economic and religious structures of Ga society. Indeed, '[e]ach major Ga settlement has a lagoon which contains some of its most powerful deities' (Clottey, 2015:45). Ga people believe that the lands are ultimately owned by the gods who inhabit the Korle and Sakumo lagoons and the sea god, Nai (Clottey, 2005). As the giver of life, land was praised as a sacred object which no individual or group was capable of owning. The *Wolumi* held the land as custodian, an authority of which was 'founded on esoteric knowledge of this ritual topography and its manipulation in the cause of ecological management' (Parker, 2000:27).

Ga land was governed by customary legal land systems, which refer to 'variegated land interests or rights vested in indigenous institutions, comprised of chiefs (both stools and skins), autochthonous land priests, and family or clan heads' (Boamah and Walker, 2016:88). Under customary law, communal land was held in trust and governed by a principle of land tenure which firmly stated that 'land is the ancestral trust which the living share with the dead. Traditionally land is therefore inalienable. This being the case, it behoves the living to so utilize land that the interests of the future and unborn generation is not jeopardised' (Amankwaah, 1989:1 quoted in Quarcoopome, 1992:40). However, as Obeng-Odoom points out, laws within communities were not uniform:

'the chiefs had their version of customary law; other groups had theirs too, and the chief's version of customary law was not necessarily *the* customary law of the people (Lentz, 2000, 2010). Interpretation and implementation were both consensual and collectively determined' (2016:664).

While all land is communally owned with the *Wolumi* as custodian, allodial rights are vested in families and clans, whose membership encompasses the living, dead and unborn. Unlike the Akans, which were more politically centralised with matrilineal inheritance structures, inheritance among the Gas was patrilineal and all lands were 'believed to be invested in the family lineages of the first-comers and in the chieftancy stools establishing some distinction between private family property' (Sackeyfio, 2012:297). Indeed,

every quarter [family]...may be said to own the land it occupies, and in addition to such land

there are further tracts known as 'hunters' lands' (Manoukian, 1964, 87) called *kosei* which are now the peri-urban area of Accra. Each quarter (or family) holds land in strips running from the coast to the interior as far as the Akwapim Hills. Their villages of *akolas* occupied these lands. To obtain occupancy rights, group members had to seek the permission of the *We* or House (patrilineal extended family) that originally hunted on these lands (Manoukian, 1964, 87). Thus, unlike the Akan, the Ga have a decentralised system of land holdings' (Yeboah, 2008: 436-437).

Thus, governed by customary land law, members of a lineage could claim usufructory rights on lineage land. A member of the quarter could farm on unoccupied land in their own quarter without permission, and those seeking to farm or construct homes on specific plots of land sought permission from the head of the family who owned that property (Sackeyfio, 2012). Following the performance of a ritual, which:

'involves provision of drinks for libation to the gods and the ancestors; the payment of a token fee, the value of which depends on the right in the land being demanded; and upon the slaughter of a sheep, the land [was] allocated. However, these rights are usufructory that is, the land cannot be alienated and the allodial rights cannot be transferred' (Quarcoopome, 1992:41).

Those seeking to farm or settle on land of a different quarter from their own, sought permission from the quarter's chief priest, elders, and other authorities (Sackeyfio, 2012). Following a similar ritual, the land was allocated. In addition, a small fee (*adobe*) was paid yearly (Gough and Yankson, 2000). Over the centuries, this system, has, broadly speaking, ensured that indigenes and migrants have had access to land (Oduro and Adamtey, 2017).

By the nineteenth century, Ga lands could be alienated by sale, gift, grant, loan, lease, or pawning (Sackeyfio, 2012). Alienation by sale occurred under the consent of elders and heads of groups who possessed allodial rights in the land. As Sackeyfio argues, 'outright sale of land to strangers in all the Ga towns was not an anomaly' where 'written transactions dealing with land transfers occurred as early as the 1830s, and sales of privately owned real estate began to take place by the 1850s' (2012:298). In the precolonial period, the most common way of alienating land to individuals or groups within the allodial rights holders was by gift. This involved the presentation of cash or in kind, drinks and the slaughter of a sheep under the watch of witnesses. Alienation by gift may also occur when a parent gifts land to his or her children while still alive, in the presence of family members (Quarcoopome, 1992:42). Unlike grants, loans, leases and pawning, alienation of land by sale or gift

transfers allodial rights. Land could be granted, loaned, leased or pawned to strangers, but this did not transfer any allodial rights, ensuring that land remained in the lineages of the firstcomers. In this regime, the responsibility for the management and allocation of lineage land is held by the leadership of each lineage, elected by family members. The family or lineage head 'oversees the use of family land, allocates to family members, distributes proceed[s] from land, and decides when land can become the private property of a member of family (Firmin-Sellers, 1996:37)' (Clottey, 2015:46). In pre-colonial Accra, the customary and social norms of Ga land governance were deeply shaped by the ecology of Accra. This sacred ecology determined that land was ultimately owned by the Gods. However, allodial rights to land were vested in lineages who held it in trust for past, present and future generations. Custom, however, was fluid, both between and within lineages and the social norms that governed land shifted over time to reflect broader changes in society. Underlying this system of land governance then, was a principle of ecological, socio-cultural and political sustainability in the loosely defined federation of Ga republics.

Following the lobbying of the ARPS (Sackeyfio, 2012), the British accepted the claims and withdrew the Bill.³⁴ Opposition to the proposed bills, however, marked an important turning point in the evolution of governance and property rights more specifically, following which, 'colonial officials consistently fought to uphold notions of customary land tenure' (Firmin-Sellers, 1996:32). Here, 'their change of heart reflects the logic of indirect rule,' which sought to build upon authority invested in traditional rulers (ibid). Indeed, the logics of indirect rule dictated that power should be delegated to traditional rulers, positioning chiefs as "natural experts": men who could issue authoritative, unambiguous declarations of custom and, in doing so, preserve peace and stability in their states' (Firmin-Sellers, 1996:34). In 1878, governed by these logics, which were thought to bring maximum stability with minimal financial cost to the colonial state, the British implemented the Native Jurisdiction Ordinance, which served to reconfigure the Ga republics into a rigid hierarchy inspired by the Akan social system (ibid) (see fig. 4). The NJO promoted the office of the *mantse*, endowing him with authority above other traditional offices and with later ordinances, he was granted power to 'forge state councils and native tribunals through which they issued statements of customary law and arbitrated local disputes' (ibid, 38). This re-ordering of the Ga politic enhanced the power of the chiefs, a shift which produced a more 'autocratic' traditional chieftaincy system, the subsequent sale of land and retention of revenues (Obeng-Odoom, 2016:666).

³⁴ Elements of the withdrawn 1987 Lands Bill did remerge as the Concessions Ordinance of 1900, which established a concessions court for the authentication of 'native grants of land for mining' where, 'no grant of rights in or over land was valid unless the court had certified its validity' (Ilegbune, 1976: 519-520). Significantly, the Ordinance's requirement for a prospecting license functioned to exclude small-scale miners while handing over a significant degree of rights and power to foreign mining companies (Ofosu-Mensah, 2011). While the Ordinance recognised the indigenous ownership of the land, the government 'excluded the sensitive subject of land ownership' more specifically (Asante, 2005:64) and offered 'little to clarify and settle the precise rights and responsibilities of both the concessionaries and the indigenous grantors in respect to the regulation and protection of the mining environment' (Ilegbune, 1976: 520). The Ordinance provided a skeleton upon which further regulations would emerge.

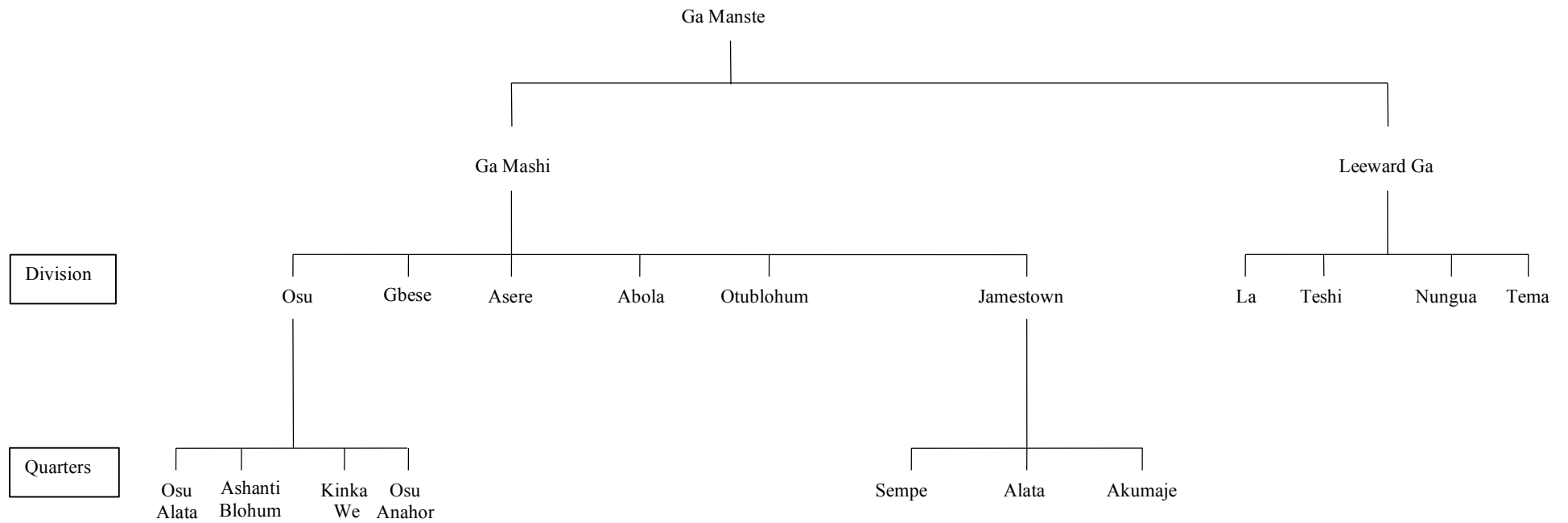


Figure 4 - 'The Political Hierarchy of the Ga State' (Firmin-Sellers, 1996: 39).

Land was central to the logics of indirect rule. Indeed, as Firmin-Sellers writes,

‘[t]he traditional rulers’ authority was predicated on their control over land. If the British now claimed that land, or if the British allowed private property rights to take hold, then the entire basis of their government would collapse. The British had to support customary land tenure, because they had to support the chiefs’ (ibid).

However, the colonial state also sought to acquire lands for public use. Here, the colonial state’s ‘dual motives of supposedly preserving Ga customary land tenure while at the same time passing many pieces of legislation to procure Ga lands for public use and protect tenure security in the environs of Accra led to the establishment and modification of both statutory and customary courts of adjudication’ (Clottey, 2015:120). The support of customary law alongside statutory law introduced by the colonial state, gave rise to plural legal systems for land in Ghana, pitching ‘Western legal provisions against the customary laws of the diverse societies’ (Darkwa and Attuqiayefio, 2012:142). Indeed, the colonial state’s land governance strategy gave rise to the ‘co-existence of different, yet mutually constitutive normative orderings of legal systems’ (Boamah and Walker, 2016:86) – a dual system amounted to a complex land regime and a legacy which continues to haunt contemporary Accra (Boamah and Walker, 2016).

As the British supported the application of customary law in the governance of land, new contests over defining what would constitute custom soon emerged (Clottey, 2015). Indeed, Ga custom was far from set in stone. As Quayson observes, ‘one of the effects of the destruction of the Ayawaso kingdom, [and] their enforced migration to the coast...was the fissuring and interethnic hybridity that came to define Ga identity’ (2014:39). These emerging struggles to define custom were set in a context where both ‘urban and suburban land became an increasingly valuable economic and political economy,’ setting in motion a ‘kaleidscope of legal struggles’ as office holders, lineage heads and individuals vied for control over increasingly lucrative land holdings (Parker, 2000: 198). As Parker writes, ‘the expanding city was hotly contested from the outset’ – a conflict, which ‘occurred repeatedly as Accra’s urban frontier spread into the surrounding *kose*’ (ibid, 198-199).³⁵ Thus, set in a context of rising land values, government compensation for land, and growing discourses and practices surrounding the rights, ownership and alienation of land, throughout the first decades of the twentieth century, a series of struggles over the meanings of customary land tenure in the Ga state ensued (Bartels et al, 2018; Firmin-Sellers, 1996).

³⁵ *Kose* is a Ga word that translates as ‘country, bush’ (Parker, 2000: xiv).

For example, oppositions surfaced between the Ga elites' reading of customary land tenure and the Manbii Party (translated as the people of the state). While the former argued that custom vested all lands in the extended family, approximating something close to private property rights, the latter proclaimed that land was owned by the divisional stools and the divisional chiefs served to manage this land on behalf of the citizenry (Firmin-Sellers, 1996:44). These oppositions would shape debates about land rights and the related attempts to form political alliances in the new hierarchical structure imposed by indirect rule. In these struggles, 'Ga customary law turned out to be a legacy and product of dominant British cum native Ga elite interests' (Clotey, 2015:122). In this unfolding situation, colonial officials lacked the knowledge or understanding to effectively appraise which claims would be least unsettling for the colonial state (Firmin-Sellers, 1996). Thus,

'the British adopted a cautious, hands-off approach to disputes...They refused to intervene consistently on behalf of one claimant, insisting instead that all controversy must be settled at the local level "by traditional means"', such that, in the Ga State, disputed custom went unresolved' (1996:57).

The broad conclusion was that property rights and custom remained both fluid and insecure, a situation that would sow the seeds for future dispute (ibid; Obeng-Odoom, 2016). Indeed, land conflicts in the Ga State increased throughout the inter-war years. These involved contested authority over land and compensation, disputes over allodial rights to land between chiefs and families and legal action pursued by those who sought to secure rights over their own land (Clotey, 2015).

Thus, the government's desire to extract value from the subterranean riches of the Gold Coast – as well as acquire land more broadly – exposed a contested terrain surrounding land in the colony. In this significant history, the colonial administration's attempt to govern through native institutions enlivened already contested regimes within the fractious Ga state. Here, a politics of ownership, tradition and governance took hold, prompting an ongoing set of disputed claims to land. In this geosocial reading, the prized minerals of the underground may be seen to have 'condition[ed] and enable[d] specific social formations' (Clark and Yusoff, 2017:6). Significantly, these social formations – which metamorphosed throughout the colonial era, into the independence era and re-articulated in the present day – have given rise to a contested politics of land which continues to govern the extraction of sand.

POST-COLONIAL LAND TENURE

Following a transition to independence, which Firmin-Sellers (1996) argues served to re-entrench the insecurities of land tenure, the Convention People's Party (CCP) led by Kwame Nkrumah furthered a socialist agenda, governed by a modernisation orthodoxy which sought to acquire land in the name of national development. The Stool Lands Control Act 1959 and the Stool Lands Act 1960 vested in the State 'complete control of any land in the country including Ga lands,' giving the state 'unlimited legal right to intervene as trustee in any stool land the State so required' (ibid 131-132). Subsequently, in 1962, the state enacted a series of acts (Land Registry Act; Survey Act; State Lands Act; Administration of Lands Act) which together 'gave the Ghanaian State through the President and the Minister for Chieftaincy, the power to authorise the acquisition and use of stool and other lands for private and public use as well as regulate the use of revenue from stool lands. Any transfer of stool land or right over stool land was not valid unless it is executed with the State's consent' (ibid. 132). During this era, Ga lands were increasingly alienated via lease and statutory laws (Quarcoopome, 1992). Land became a highly political issue at a local, regional and national scale and allegations amounted surrounding the corrupt allocation and management of land by politicians and public officials (Clottey, 2015). However, this centralisation of state power lacked legitimate authority, while the state itself suffered limited capacity to implement such laws (ibid). Consequently, various actors – individuals, real estate developers, traditional authorities etc. – continually 'devised sets of strategies for land ownership, access, use and disposal' (ibid. 135), The effect was 'the perpetuation of tenure insecurity which resulted in multiple land sales, land litigation, chieftaincy disputes, landlessness, and land conflicts' (Clottey, 2015:231). Indeed, despite reducing the power of the elites over the control of land, Firmin-Sellers (1996) argues that, set within the context of limited checks over the central government's power, the institutions of independence failed to articulate the government's willingness to enforce property rights. As such, 'the constitution did not provide any assurance that government would not use its coercive authority arbitrarily, seizing individually held property and profits' (1996:142). Like Clottey, she argues that this ensured that property rights remained insecure. Critically, given that chiefs retained recognition as the custodians of land, the 'radical framework of land reform based on the concept of social justice rather than traditional right was never implemented and the conditions were created for a rapprochement between the state and the chiefs' (Amanor, 1999:59).

The image has been redacted for copyright reasons.

Image 35 - A Piam employee.

Ubink has argued that '[p]ost-colonial governments in Ghana have shown an ambivalent attitude to chieftaincy' (2009:174). Indeed, following the overthrow of Nkrumah's leadership of the CPP, both the National Liberation Council (NLC) (1966-1969) and the Progress Party (1969-1972) sought to overturn many of the laws previously laid out, including the privatisation of state-owned enterprises and farms (Clottey, 2015). Significantly, following the military regime of the NLC, the Progress Party (Second Republic) vested the control of stool lands in their respective stools (ibid). A subsequent military regime, led by the National Redemption Council and the Supreme Military Council, was marked by a series of compulsory acquisitions that resulted in landlessness, displacement, land disputes and tenure insecurity (ibid). Under the Limann administration (Third Republic), the security of communal land tenure was promoted and traditional leaders given representation on the Lands Commission and district councils (ibid). The final military regime led by the Provisional National Defence Council (1982-1992), introduced a series of institutional and legal measures to promote tenure security. However, land titling was unable to resolve ongoing disputes in the Ga State, where population growth and demand for residential land in Accra generated new pressures on land (ibid). It was estimated that on the eve of Ghana's return to constitutional rule, more than 6,600 plots of land were under litigation (Odame-Larbi et al 2004, in Clottey, 2005). Together, this history may be read as a set of accumulated regimes of contested land governance. Here, the attempted deployment of centralised power, the continuous re-crafting of institutions and the ongoing re-invention of the laws of customary land served to centre ambiguity and contestation as central facets in the management of land in Accra. In contemporary Accra, these principles remain the underlying conditions of land governance in the region and, as I argue, continue to shape a politics of sand extraction.

CONTEMPORARY EXTRACTION

Today, land is governed via a pluralistic legal system. While both customary and statutory law coexist alongside each other,³⁶ customary land occupies approximately 80% of Ghana's total lands, operating through diverse tenure systems (Nyasulu, 2012). Under the 1992 Constitution, traditional leaders are endowed with the 'fiduciary obligation to administer land in the best interests of their people (Article 36), for whom they are supposed to hold and administer the land in trust' (Barry and

³⁶ The Constitution, which continues to govern land administration in the present day, stipulates that there are two types of land in Ghana: 'Public or state lands are defined as lands compulsorily acquired by the government through the invocation of the appropriate legislation, vested in the President and held in trust by the State for the entire people of Ghana. In contrast, private lands in most parts of the country are in communal ownership, held in trust for the community or group by a stool or skin as symbol of traditional authority, or by a family...Fundamentally, land ownership is based on absolute "allodial" or permanent title from which all other lesser titles to, interests in, or right over land derive. Normally, the "allodial" title is vested in a stool, skin, clan, family, and in some cases, individuals. The traditional arrangement for making land available and accessible for land uses in Ghana consists largely of the exercise of rights under "allodial" title and the rights of the usufruct as limited by the "allodial" title' (Ministry of Lands and Forestry, 1999:2)

Danso, 2014: 360).³⁷ Additionally, while state laws play a limited role in land acquisition and transfer under customary law, land is still required to be registered under statutory laws (Nyasulu, 2012). Boamah and Walker argue that the plural legal systems initiated under the ‘distortions’ of colonial rule have generated competing regulated and unregulated land markets, whereby ‘statutory and customary legal systems have been adapted by actors whose ultimate goal is to maximize benefits/minimise sanctions and legitimize their land use actions’ (2016:87; Darkwa and Attuquayefio, 2012). Nationwide, the acquisition, administration and governance of land is beset with challenges including: difficulty in determining boundaries of stool/skin lands; litigations between stools, skins and other land owning groups; conflicting claims of ownership; land encroachments; multiple sales of the same plot of land; unapproved development; environmental problems causing disputes, conflicts and litigations; underutilised land acquired by the state; delayed compensation payments from the state to landowners; conflicts of interest between and within land owning groups and the state; lack of consultation with owners and chiefs; and lack of consultation among land development agencies (Ministry of Lands and Forestry, 1999) – and it is set within this context of contestation that land is acquired for the extraction of sand.

As Mr Osei reiterated, acquiring land for sandpits demanded rigorous research to decipher ownership, boundaries and potential disputes on plots. If land went to court, the process could take years, and as Barry and Danso observe, ‘the layers of networks of family relations mean that a case seldom involves the simple resolution of a dispute between two parties (Crook, 2012)’ (2014:361). Disputes over land, I was told, were likely to intensify where land was rapidly increasing in value, particularly at the edges of the city. Indeed, like the dramatic price increases for Ashalaja land plots that Mr Frimpong recalled at the opening of the thesis – the shifting edges of the city were in turn increasing the market value of vast tracts of rural land. As values increased and prospects for making considerable sums of money drew closer, conflicts between and within land-owning groups, I was told, was highly predictable.

The researchers played an important role in performing the early labour of ensuring that the company would not be exposed to the risks associated with lands caught in dispute or formal litigations. For sand winners, the risks associated with this uncertainty embedded in the land are

³⁷ As Larbie et al note, ‘this implies that the indigenous owners take all management decisions and exercise the powers that go with ownership – the rights to own, sell, receive payment, and manage, and the rights to decide on who is allocated a plot, terms, conditions and price, and so forth. Yet Article 267 (2) sets up the Office of the Administrator of Stool Lands (OASL) and charges the office with the collection and disbursements of all stool land revenues, defined to include all rents, dues, royalties, revenues and other payments, whether in the nature of income or capital from stool lands. The implication is that even though indigenous owners have the capacity to manage their lands and enter into contracts, they do not have the capacity to collect the monies they negotiate for. This drives all payments to indigenous owners into the extra-legal framework, because they become illegal when paid to the landowners’ (2003:366).

compounded by the need to move regularly, re-negotiating access at each site. Mr Osei gestured outwards:

‘We move a lot. Just yesterday we were by the roadside over there and now we will be here for 2 or 3 days and move on. The land is not as big as it was before. Formerly, you could get land, 200 acres, full of sand, but presently, all lands have been sold out, leaving smaller and smaller portions occupied by crops. The majority of land has now been sold out to estate developers: it is mostly lands belonging to families which are left.’

Coupled with the smaller land parcels was an increased demand for sand, a demand facilitated by technological advances. As he observed:

‘Demand has increased. There are around 150-200 trucks per day, per pit. Ten years ago, there were around 200-300 trips, but vehicles were very very small. One truck at this time now, could take three or four of those in the past. So the volume has increased. Because every individual is developing and the government is putting up infrastructure: construction is everywhere. Sand forms about 70% of materials used in building and construction. Everything is sand. Before anything can happen, sand is the first requirement.’

Thus, smaller land parcels, higher demand and technological change drove the need to shift the sandpit at more frequent intervals than ever. These specificities, Mr Osei reiterated, explains why sand winning, unlike much else of Ghana’s extractive economy, is a national industry:

‘Chinese companies want land in large quantities, but you can’t get sand like that. The capital is not large and you get land issues. It’s not suitable for them, for their business trends. They want to bring plenty of machines, taxes, workers, with large overheads. But sand is not like that. We move regularly.’

This reflects the government stipulation that the extraction of industrial minerals is reserved for national citizens unless an investment of US\$10 million is made, bespeaking the limited opportunities for large scale profit in the sand economy. Indeed, profits of sand paled in comparison to other extractive industries. Futures could not be easily projected and thus capital could not be extensively invested. However, Mr Osei’s sentiment also expressed the realities of a mobile sand economy that, no matter its pace of movement, could not disarticulate itself from the unresolved politics of land. This demanded knowledge, experience and understanding of the politics of land – a politics rooted in colonial histories, later transformed through independence mandates, re-iterated through

national politics and intensified through rapid urbanisation. Coupled with a technical knowledge of mining temporalities, machines and matter at the sandpit, it is this knowledge of the land, which, I would argue, presents its own barriers to foreign extraction. Indeed, extracting sand demanded deep knowledge of the dynamics of land as a socio-natural institution. It required an insight into its irregular geology. It obliged an understanding of its fluctuating ecologies. And it necessitated an appreciation of its evolving politics. In this geosocial reading then, the extraction of sand is not simply a matter of location. Sand is locked into the land in which it was embedded. This land is geologically uneven, ecologically fluxing and politically contested. Of significance, I argue, is that this politics remains deeply embedded in a colonial history of extraction and land more broadly, thus exposing the 'imperial debris' (Stoler, 2013) which continues to shape the extraction of sand in and for the postcolonial city of Accra. In the following section of the chapter, I extend this reading of the shifting sandpit, detailing the more specific ways in which the extraction of sand generates its own politics.

SECURING THE PIT

The extraction of sand faced ongoing political contest and each site required constant negotiation to secure the hole (Bridge, 2015:3). Despite the labour of researchers, once sand began to surface at the pit, there was always potential for new claims to emerge and this, I would learn, was not unusual. For instance, it was a late afternoon in June and a dark grey sky had hung threateningly over the sandpit for the entire day. Finally, the rain fell. For the duration of two hours, myself, and a few other employees sought cover in the skeleton structure of a house: a roof (in most places), four brick walls, a partition and windows. When the rain stopped, we made our way back to the sandpit. However, we were stopped by an agitated young man, carrying with him a small machete. He spoke with a Piam employee in *Twi* and it was later translated to me, although it was not hard to interpret that there was a problem or claim being made. The young man had been walking upon the hill, providing him with an expansive view of the sandpit. This was his family land, he argued, and he had not been informed nor compensated for the sand being extracted. The Piam employee sought to resolve the situation. He took the young man to Mr Osei, who engaged with him and settled the matter, through conversation, or compensation.



Image 36 - A mate anxiously loads sand ahead of the impending rain.

On a separate occasion, sat upon a pile of building blocks with Mr Osei, overlooking a new sandpit, a man approached us, wearing a t-shirt inscribed with the words 'Golden Exotics' – a nearby commercial farm. However, the man who approached us was not here to discuss the Golden Exotics disputes (see chapter six). He was here to discuss his own land. He lived in the village near to the sandpit, but his land, where he farmed cassava, was being destroyed by *Piam's* bulldozer. Mr Osei engaged with the disputer and he explained to me that he would deal with this claim, reiterating that 'the boys need to be careful on farmland.' However, it was not always a case of carefully respecting the technical boundaries of the sandpit, as agreed with the supposed landowner and surrounding farmers. Rather, these boundaries may be disputed mid-extraction. As Mr Osei explained, 'someone can show you farmland and say mine is from here to here, but then someone else will come, after you've paid compensation and say this bit of land is for me.' Given the ambiguities of land ownership, boundary disputes and intra-family contestations in the area, it was not something that could be easily dismissed and would be dealt with on a case-by-case basis, providing compensation at an appropriate value. In this way, there were always possibilities for disputes and claims, given that the extraction of sand presented opportunities for the demanding value otherwise locked into the ground beneath. These disputes were taken seriously, and Mr Osei exposed the vulnerabilities of sand winning when he lamented, 'you have to take care and deal with these kinds of claims and demands or they will spoil the machinery. They can put salt in the exhaust...or a cloth in the engine and it will spoil.'

Thus, the sandpit was not simply a place which mirrored the politics of land but was rather a space through which new claims could emerge, presenting an emergent politics of contestation and compensation. The porous edges of the sandpit exposed *Piam* to the ongoing possibility of dispute and these attempts to continue extraction in the face of potential contestation ran alongside the shifting ecologies of the sandpit itself: the possibility of rain, the strength of the ground, the texture of the sand. Indeed, while a contested relationship of land shapes where sand is unearthed, the sandpit *itself* manifests as a space where otherwise dormant ownership claims and boundary disputes are brought to life. Together, these ongoing practices of securing the pit reveal a specific kind of politics of the shifting sandpit.

The image has been redacted for copyright reasons.

Image 37 - A Piam employee shares his knowledge of sand.

EXTRACTING SAND IN AND FOR A POSTCOLONIAL CITY

In this chapter, I have detailed the processes through which sand is extracted from Accra's shifting edges. The chapter exposed that while geology may shape the underlying possibilities for the extraction of sand, geology alone could not determine the sandpit's shifting location. Rather, the shifting sandpit is embedded in fluctuating environmental conditions and a contested, postcolonial politics of land, which must be re-negotiated across the time-spaces of Greater Accra. In this way, I argue that each grain of sand unearthed at the sandpit is the product of a constellation of relations between nature, politics and time. Far from an inevitable unearthing of material, the shifting sandpit can be positioned as the deeply contested surfacing of the region's uneven 'deep time' (Gandy, 2018). In the final part of the chapter, I extended this geosocial reading to expose the political potential of the sandpit. Here, the unearthing of sand sets in motion its own politics that are played out as sand is extracted. Thus, the sandpit becomes a place where contestations take root, disputes may unfold and new claims may be made. Thus, the sandpit can be best understood as an emergent political space, where the de-territorialisation of sand works to reflect, reproduce and remake a postcolonial politics of land.

In his reading of energy extraction landscapes, Bridge argues that 'an oil well or mine shaft represents a discrete, molecular point of access rather than a contiguous territorial claim,' thus giving shape to 'the punctuated, discontinuous geographies of extraction' (2015). While the sandpit may reflect elements of this discrete territorial geography, I argue that its continuously *shifting* nature over short

time spans ensures that the extractive landscapes of sand reveal a more specific kind of contested geography. Indeed, unlike the relatively stationary holes of precious minerals or oil rigs, the sandpit regularly moves across space. This movement exposes the sandpit to an ongoing politics of land and an unfolding set of ecological conditions. Thus, through its regular movement, the shifting sandpit is not only a negotiated territory, but is rather repeatedly remade. This necessity to repeatedly renegotiate the extraction of sand renders the shifting sandpit a transforming and transformative space, which I contend, exposes the always incomplete, always undetermined, circulations of socio-natural power implicated in the urbanisation process.

Thus, I argue that the sandpit remains an un-determined space, resembling in many ways, what De Boeck and Baloji denote as a 'postcolonial hole.' In De Boeck and Baloji's rendition of Kinshasa, they assign the 'postcolonial hole' as 'an opening' (2017:151). Deploying the language of the 'hole' as one offered up by the city's residents, they explain how:

'the concept of hole, or libulu in Lingala (which is the city's lingua franca)...has become a local master trope, a conceptual figure, to express the dismal quality of urban life in the postcolonial city...refer[ing] not only to the tangible physical depressions on its surface, but also to the black hole of urban living' (2017:150).

Yet, they argue, it is never just a black hole: it 'offers an aperture, an opening, a possibility, at least for those who know how to read an alternative meaning in its blackness' (2017:151). They situate the hole as the 'city's baseline, its ground zero' and by talking across various analytical sites, highlight the ways in which 'attempts are being made to fill the postcolonial hole' and the 'possible answers residents come up with in response to the challenge it poses' (2017:153). The sandpit is perhaps its own kind of postcolonial hole. Indeed, more than just a physical crater at the city's periphery, the sandpit remains the source of the city's expanding materiality – as the city's material baseline. Moreover, while governed by a postcolonial politics of land, geological relations and shifting ecological conditions, the shifting sandpit is also a negotiated space, offering up a moment where power may be contested, nature may retaliate, the rules may be inverted and new claims to the subterranean may surface.

The image has been redacted for copyright reasons.

Image 38 - Spectators.

To conclude, in the city of Accra, sand is required to give shape to its expanding material form. As the city's constitutive outside, sand must first be extracted from the earth at the city's shifting edges.

In this chapter, I provide a geosocial reading of this extraction, exposing the ways in which the surfacing of sand from the subterranean is both embedded in and productive of a set of contested socio-natural processes. Indeed, while millions of grains of sand may be unearthed to build the blocks of the expanding city, the terms on which this sand comes to the surface of the city's edges are not written in stone. Rather, written in the shifting sands, these terms work to reflect, resist and reproduce the contestations embedded in a postcolonial, socio-natural politics.

The image has been redacted for copyright reasons.

Image 39 - Discussing the sandpit.

LABOURS OF SAND: RETHINKING URBAN EXTRACTION

'There are no more workers as such. There are only laboring nomads'
(Mbembe, 2017:3)

LABOURS OF SAND

This chapter details the multiple labours that surround the extraction and movement of sand, thinking about how sand becomes embedded in the life of the city, prior to its emergence as recognisable urban form. In this way, by turning to the labours of sand, this chapter exposes the ante-lives of urban form. I show how these labours draw out alternative readings of work and the informal economy, hinting at a potential politics therein. The chapter opens at Awoshie Junction, thinking with the lives and stories of its inhabitants and what these tell us about securing a livelihood in Accra. I then situate these stories within the broader argument of the chapter, outlining more specifically what this chapter offers to the thesis and a literature on labour more broadly.

LIFE AT AWOSHIE JUNCTION AND BEYOND

Securing a livelihood at Awoshie Junction was volatile. Cynthia, with whom I became closely acquainted, had spent the previous months seeking irregular work at her Auntie's salon. Here, she sat upon the porch of the salon and when requested, would help her Auntie perform various kinds of salon labours: hair washing, weave removal, sweeping and hair separating. Over time, she saved enough money to purchase a small glass cabinet, which she stocked with jewellery bought at wholesale price from Makola market in downtown Accra. To benefit from the best deals, she arose at 3am to be at the market by 4am. Life had not always been this way for Cynthia. She had previously been in a relationship with a boyfriend, who had supported her with rent payments and some of her living costs. Following their break up, without an income or place to stay, she turned to her Auntie. Cynthia's mother lived in Accra, however, she could not stay in the house with her, given the limited space in their home, which accommodated three of Cynthia's brothers and her younger sister. Her mother was also periodically extremely unwell, suffering from diabetes, which required regular and expensive treatment. At 26, Cynthia could not depend on her mother or siblings and was in fact under immense strain to contribute to their household costs and medical treatment when needed.

Finding work was challenging for Cynthia. Her father, who had remarried and moved to the US, had supported her first year of university in Accra, however, following his falling ill, he was unable to

upkeep the fees and Cynthia was forced to abandon her studies. As she explained, it was difficult to locate regular and reasonably well-waged work without a university degree, given that even with a degree, the market was tough. Following the break-up with her boyfriend, Cynthia had pulled together enough resources from friends and extended family members to rent a modest space in Olebu: an area around 30 minutes from Awoshie Junction, towards the satellite town of Pokuase in Greater Accra. Her space was part of a newly built, small set of single storey dwellings, which the landlord had built at the back of his existing plot. The dwellings were not yet connected to water services and thus occupants depended upon a local bore hole from which they collected water to be stored in a large drum. This water was used for washing bodies and clothes only. Like the majority of Accra's inhabitants, drinking water was still to be purchased in bottled or sachet form separately. Over time, occupants at Cynthia's home periodically suffered from skin conditions which they attributed to the water they used. The landlord offered to fix a water connection to the dwellings, provided inhabitants could front the costs of doing so. Over the course of a few months, the inhabitants collectively sought out resources to pay for the right to clean washing water.

Meanwhile, securing a livelihood at Awoshie Junction was difficult for Cynthia. During the first few weeks of opening the jewellery cabinet, business was good. No one else sold jewellery nearby and friends and family purchased one or two sets of modestly priced goods. However, once purchased, it was difficult for Cynthia to entice further custom, for at least another few months or so. Cynthia decided to approach offices closer to central Accra. She packaged jewellery and requested entry into offices. At first, this appeared successful and generated considerable sales. However, it was short lived. Within a few weeks, offices had been exhausted and few customers were prepared to buy non-essential goods on a regular basis. Cynthia's continued search for markets and the need to improvise demonstrated the difficulty of securing an income in saturated, low-income markets. If people did not have money, they could not buy. The continued movement and repackaging of goods was an attempt to make the next block of sales, but it was never sustainable. It was one of many strategies that were required to keep afloat in a difficult marketplace.

Despite paying two years of rent to the landlord, one evening, Cynthia returned home to learn that her house was to be demolished. Confused, a member of the local government explained to her that the landlord had illegally constructed the dwellings on state land. Cynthia was forced to remove her possessions from her home and relocate them to her now boyfriend's small room close to Awoshie Junction – a room he looked after for his brother who had travelled to Dubai in hopes of better-paid work. Cynthia's landlord had fled the plot and would not return any of the occupants' phone calls. Eventually, months later, the landlord agreed to pay a month or two back to the occupants: he had already spent the two years of rent he collected. As these events unfolded, Cynthia's place at

Awoshie Junction was also precarious. The porch upon which she sat fell beneath the overhead wires of an electricity connection – a situation I detailed in chapter two. This land, which sat in the shadows of the wires, belonged to the state and was to remain unoccupied at all times. As explained, those under the wires at Awoshie Junction had recently been threatened with removal by the state, however, following a series of meetings and dealings, they remained in place for the time being.

The image has been redacted for copyright reasons.

Image 40 - A long-term resident and Father at Awoshie Junction.

One afternoon at Awoshie Junction, Cynthia and I looked out across the Junction, where in the distance we saw Winfred arranging his goods on a table. Winfred had once owned a container on the land next to the sand station. Here he sold electronic goods: mostly wires and plug sockets. When the church successfully claimed ownership of the adjacent land, the sand station and a string of small enterprises were removed. With nowhere else yet secured in the city, Winfred had rearranged his goods, displaying them on a small wooden table at the immediate roadside. He was looking for a place nearby, but the cost of renting a space was high and much of the invested materiality of his previous shop was immobile. Our eyes drifting back closer to the porch upon which we sat, we heard the echoing calls of young women, weaving in and out of the traffic, shouting 'Pure...Pure water.'³⁸

Cynthia's recent experiences in Accra, woven together with the lives of people like Winfred and the many Pure water sellers that paced the Junction, speak to the ongoing difficulty, strain and improvisation required to making a living in the city. With homes and work embedded in constantly shifting spaces, securing a regular income and investing in a home was challenging. This shifting situation required constant negotiation with people, the state, place and things. While specific, these stories are perhaps not unique. As Ferguson writes, 'Africa's fast-growing cities are increasingly inhabited by people who lack both land and formal-sector jobs and who improvise complex and contingent livelihoods through a combination of petty trade, hustling, casual labor, smuggling, prostitution, begging, theft, seeking help from relatives or lovers, and so on' (2015:91).

This chapter seeks to engage with the kind of urban improvisation outlined above by turning more closely to the economies of sand and more specifically, tracing the ways in which these economies emerge as a platform for the extraction of value by a range of individuals across the city. The chapter details the ways in which value is extracted from the shifting sandpit and sand itself as it moves from

³⁸ 'Pure water' was the name of a particular brand of sachet water, sold for 20 peswas. However, calling 'pure' was widely understood as selling any brand of sachet water.

sandpit to city and thus the ways in which sand becomes a source of livelihood for a broader set of individuals, beyond the sand contractors and tippers. By considering the economies of sand, the chapter thinks about how value is made in and through the city, how economies are spatialised and how work in the contemporary city is both practiced and experienced. In doing so, I extend the meaning of extraction beyond its more obvious deployment in the context of sand mining, to consider extraction as a broader set of strategies for claiming value from otherwise exclusive transactions. I argue that these extractive economies may offer us significant analytical purchase in understanding contemporary livelihoods in the city, as well as opening-up a political aesthetic of rights and distribution in future urban worlds (Ferguson, 2015). Indeed, by thinking through extractive practices as a broader kind of political demand, I suggest we are drawn to consider the possibilities of emerging distributive claims on economies that centre and span urban regions of the world. I argue that if cities continue to expand with limited opportunities for reasonable working lives, perhaps the city needs to be rethought as a place of extraction – as a place for *claiming value* and *demanding income*. If a right to space and housing has been widely politicised, could too, a right to an income? What would a de-linking of labour and income in the city actually look like? And how could this stretch 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 on which flows could be made and what would these (global) geographies look like? Through engaging with the broader economies of sand, this chapter offers some tentative responses to these questions.

The remaining chapter is structured as follows. I first introduce a literature which deals with the future of work, in sub-Saharan Africa and in Accra more specifically. I then turn to consider the uneven flows of revenue from the extraction of sand, which expose the unequal terms through which sand turns to city. However, I supplement this reading with a more in-depth reading of the broader forms of labour in the sand economy, which together elucidate the way in which sand emerges as a platform for value extraction, both at the sandpit, and as sand is shifts across the city. I then turn to an analysis of a 'rightful share' and pose some further questions for thinking about extraction, income demands and urban futures.

The image has been redacted for copyright reasons.

Image 41 - Looking into the future.

BEYOND THE "PROPER JOB"

In the introduction to *Critique of Black Reason*, Mbembe sketches out the grand moments in the 'biography of the vertiginous assemblage that is Blackness and race' (2017:2). In this analysis,

Mbembe takes the condition of Blackness to the limits of the human species, 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). It is this condition that he calls the ‘*Becoming Black of the world*’ (ibid). Painting a picture of a present marked by the triumph of finance capital, digital technologies and a ‘postimperial military complex’, he writes that ‘[i]f 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 of the ‘*Becoming Black of the world*’ captures a broader sentiment expressed across academic disciplines and throughout government policy circles. Reflecting on a generalised anxiety about the demise of ‘proper jobs’ and the ‘social economic stability they were long expected to anchor,’ Ferguson and Li invoke Standing, who observed that, looking back, the 20th century ‘now appears as “the century of the labouring man”’ (Standing, 2002:7 in Ferguson and Li, 2018:2). The anxiety of the prospect of the ‘wageless life’ (Denning, 2010) prompted the International Labour Organisation (ILO) to assign the newly formed ‘Commission on the Future of Work’ with 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, 2019). In a landmark report, the ILO (2019) sets out a future of work in the context of the expanding economies of digitisation, automation and low-carbon transitions.

For Ferguson and Li, in order to engage with this contemporary conjuncture we must ask questions that liberate us from a fixation ‘on the old story-line of ever-expanding wage employment’ (2018:4). In this light, 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). Indeed, by attempting to denaturalise the idea of a ‘proper job’ while simultaneously re-politicising forms of labour that sustain vast numbers of people around the world, Ferguson and Li invite us to:

‘resist the tendency to see the displacements and disruptions of the contemporary global political-economy simply in terms of loss and nostalgia for the past, and instead to map a richly variegated landscape of emerging forms of belonging and aspiration’ (ibid, 15).

Thus, they 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). Thus, this chapter responds to the kinds of questions posed by Ferguson and Li. Indeed, how might we understand what constitutes living and livelihoods in cities marked by this conjuncture? How might

we move beyond projections generated via stereotypes bifurcated by despair and optimism and open-up space for understanding the present (Di Nunzio, 2019)?

In present sub-Saharan Africa, observers have argued that current economic growth across the continent has had limited success in generating sustainable economic opportunity for its citizens. The 2018 Ibrahim Index of African Governance concludes 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, 2018:54). Indeed, their headline summary contends that ‘Africa’s growth is still mainly jobless’ (ibid). In December 2018, the International Monetary Fund (IMF) published a report entitled ‘The Future of Work in Sub-Saharan Africa,’ presenting 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 projected increases in population growth and given the continued migration towards cities, this requirement will be likely marked by the need for ‘urban jobs’ (Abdychew et al, 2018:1).³⁹ In this light, it is perhaps unsurprising that delivering jobs was a cornerstone of Ghana’s New Patriotic Party 2016 election manifesto, which outlined the party’s pledge to establish a factory in each of the nation’s 216 districts. Thereafter christened as ‘One District One Factory’ or ‘1D1F,’ the policy promotes foreign investment in key sectors, including energy, infrastructure, agro-processing and tourism and seeks to extract more value from Ghana’s raw materials (ft.com, 2017).⁴⁰ The industrialisation policy has attracted \$19bn worth of Chinese investment, centring on developing the bauxite and aluminium industry, as well as expanding rail links (ibid). This governmental pledge is set within a context in which 90% of the currently employed population, 15 years and older, are in the informal sector – with highs of 96.2% in rural areas and lows of 84.1% in Greater Accra (Ghana Statistical Service, 2015).

³⁹ The report etches out the challenges and opportunities of the Fourth Industrial Revolution for sub-Saharan Africa – a revolution marked by an expansion of machine abilities, artificial intelligence and robotics, alongside developments in the speed of internet and data storage capacity (ibid). Building on existing work by McKinsey Global Institute (2017) and the World Bank (2016), who estimate that between 40 to 60% of jobs could be at risk from automation, they set out three scenarios. In ‘Africa Arisen,’ the IMF project a situation whereby technological change and global integration have been harnessed successfully across the continent, prompting both an expanding middle class and job volatility. In ‘Africa for Africa,’ ‘inward looking policies’ generate some benefits from regional integration, however, limited tax revenues present funding challenges for governments. Finally, in ‘Africa Adrift,’ the ‘reshoring’ of manufacturing to advanced economies and the rapid onset of climate change leaves most economies ‘stagnant and indebted’ (ibid). In this scenario, ‘informal jobs in subsistence agriculture and low productivity services remain dominant’ (ibid). While offering ways of engaging with unfolding presents, the scenarios deliver limited critique of the political economy of global integration or the new forms of extraction likely required for the Fourth Industrial Revolution. Presenting a limited set of options for securing sustainable livelihoods for the continent’s urban inhabitants, these simplified scenarios speak to the anxious futures of nations and the cities within them.

⁴⁰ ‘Cash needed for Ghana’s ambitious ‘one district, one factory’ policy’ (ft.com, 2018).

The image has been redacted for copyright reasons.

Image 42 – Business women at Baah Yard.

With these realities in mind, studies that engage with work, livelihoods and labour in Accra are not difficult to locate. The term ‘informal economy’ was in fact engendered 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 in the 1980s onwards, which transformed the landscapes of social reproduction in African cities more broadly (Obeng-Odoom, 2012, Grant, 2006). At this historical conjuncture, ‘the implementation of Structural Adjustment Programs, and collapsing urban economies [has] resulted in the loss of city jobs, the downsizing and outsourcing of municipal services, and the cutbacks of subsidies for housing and basic urban infrastructure’ (Murray and Myers, 2006:120). Where population increases in urban areas ‘have not been matched by opportunities for wage-paid employment, expectant workseekers in the cities and towns have been forced to find other means to generate income’ (2006:120). Consequently, in many African cities, this dramatic transformation in the ‘terrain of social reproduction and survival’ (ibid, 123) has restructured ‘the time and space of African lives’ (Simone, 2004:8). 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 (Grant and Oteng-Ababio, 2012; Langevang and Gough, 2012, 2008; Quayson, 2014; Gillespie, 2016).

The image has been redacted for copyright reasons.

Image 43 - Pure Water.

The analysis in this chapter, 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’ (2007:28). This is indeed a reality in sub-Saharan Africa, where 70% of workers are employed in vulnerable employment – or labour marked by ‘limited access to social protection schemes’ and

‘confronted by low and highly volatile earnings’ (ILO, 2016:3). Thus, while the chapter situates its findings in conversation with some existing work on [informal] livelihoods, I argue that sand invites a different kind of analysis than that offered by the spatial fixity or industry specific nature of existing studies of [informal] work. Rather, by generating empirical data surrounding the movement of sand across the city – indeed an urban economy otherwise unexplored – we are invited to understand the spatialisation of urban economies, exchanges and engagements in more flexible, hybrid and contingent ways. The remaining chapter brings to view a series of ethnographic narratives which expose the ways in which sand emerges as a platform for exchange, engagement and ultimately new forms of value extraction in the city.



Image 44 - Preparing drinks to sell on the road.

URBAN RICHES

In many ways, sand conjures up a similar story to other extraction processes. Sand is extracted from the earth and revenues flow to both those with the capital and the owner[s] of the land in which that resource is embedded. This takes place in the context of specific power dynamics embedded in the politics of land. As discussed, in Greater Accra, the majority of land belongs to the Gas. The customary land system designates that ‘land belongs to a vast family of which many are dead, few are living and countless numbers are still unborn’ (Ollenu, 1962:4). The majority of lands are family lands, where allodial titles are held in trust by the family heads. Customary law dictates that members belonging

to a lineage may be granted usufructuary rights, and land may be automatically inherited by descendants. However, today, broadly speaking, landowning is shifting from communal usufruct rights to non-customary leases shaped by market land values (Lefore, 2012). Prompted by increasing demand for land, the designation of land as a 'social good' is increasingly being replaced by its commercialisation, where individuals pay a fee determined by the market (Oduro and Adamtey, 2017). Thus, while in the past, 'strangers' acquired land through the presentation of drinks and a small sum of money to the head of the family,⁴¹ now 'plot leaseholds are being sold for amounts that reflect the economic value of the land' (Gough and Yankson, 2000:2497).

This is set in the context of concerns regarding family heads and elders in their role as land custodians. Indeed, 'unlike Stool Land, which is recognized and regulated by the constitution of Ghana, the communal significance of Family Land is somewhat ambiguous' (Andrews, 2017:28). Here, 'Family Lands, implicitly inferred by the 1992 Constitution as private property, are devoid of extensive government regulatory mechanisms compared to Stool or skin lands' (Ministry of Lands and Forestry, 2003:13), thus, ensuring that 'Family Heads enjoy a great deal more freedom than Chiefs in how they wish to allocate or dispose of their lands and the proceeds from said allocation or disposal' (Andrews, 2017:28). Unlike Stool Lands, where revenues are divided among the Stool, traditional authority, District Assembly and the OASL, family lands may 'be owed to future generations of the family to which they belong, but even that is contentious, and there may be a great deal of intra-family conflict over lands and their proceeds' (ibid. 58). In this remit, the extent to which the money from land transactions flows into both the wider stool or extended family varies and is subject to much dispute and controversy (Gough and Yankson, 2000; Oduro and Adamtey, 2017; Bartels et al, 2018; Barry and Danso, 2014). Indeed, Bartels et al (2018) write of the 'de facto privatisation of land,' where in some cases, by retaining land revenues and making decisions without consent from the elders, traditional land custodians act as both private owners and private managers of land. They argue that the colonial regime, which elevated the power of chiefs above their subjects, the post-colonial state's relative policy of 'non-interference' in chieftaincy concerns, and the limited capacity of contemporary customary land institutions, have together functioned to promote an environment in which the de facto privatisation of land is made possible. Meanwhile, Lefore argues that the more recent transition to democracy served to elevate land as a 'wealth-building commodity for furthering political interests' (2012:231). Indeed, the 1992 constitution granted traditional authority control over land, excluding members of stools or extended families who may lack resources to process land leases (ibid). Within this context, the constitution effectively ignored the Head of Family

⁴¹ A small fee was (adobe) was paid annually and there was no gender differentiation in this administration (Gough, 2000).

Accountability Act,⁴² which, under the ruling PNDC ‘had provided the subaltern classes with a tool to seek redress when the traditional aristocracy abused power and mismanaged land or land revenues’ (ibid. 238).

The fact that a significant majority of lands in Accra are family lands, may suggest that, like the sale of land leases, the revenues from sand flow towards already powerful families and individuals therein.⁴³ Indeed, existing research has supported this position, suggesting that revenues from the sale of sand seldom flow into the broader community (Oduro and Adamtey, 2017). Money often stays within elite landowning groups, thus reflecting broader inequalities in access to land. Indeed, *Piam* explained that they paid the money directly to the landowner and while they could not be certain where this money would flow, they suggested that, like the sale of land leases, it would remain in these same hands. Thus, while those renting land may be compensated for their crops, they would not receive the benefits of the sale of sand and, as I discuss in the following chapter, would likely be displaced in the near future to make way for residential development.

The image has been redacted for copyright reasons.

Image 45 - Spectators at the sandpit.

In an analysis of geology and race, Yusoff writes that ‘geology is a mode of accumulation, on the one hand, and of dispossession, on the other, depending on which side of the colour line you end up on’ (2018:3). In this context, sand’s geologic mode of accumulation and dispossession is more aptly shaped by one’s position with respect to customary institutions – itself a colonial product. In this way, the shifting sandpit manifests as ‘a space of ecological appropriation in which those with social power lay claim to naturally produced materials’ (Bridge, 2015:1) – where social power is both historically and place specific. Indeed, more broadly, Yusoff observes that ‘geologic relations are always material relations of power’ (2018:59). Through the inequalities of revenue flows, the extraction of sand exposes itself as an uneven set of geologic relations, which remain embedded in [post]-colonial histories of land and place-specific regimes of power. Revenues extracted from sand seldom flow to

⁴² ‘Law 114 gave subjects and family members a legal means to demand accounts on land and land-based resource revenue and to remove customary leaders that mismanaged land or other stool resources. Law 114 also placed customary matters, chieftancy succession and performance, into the secular court system. The PNDC, through the CDRs, assisted stool subjects and family members to use Law 114 to assert their power over land, resources and local politics. The PNDC disregarded the objections of the traditional aristocracy to Law 114 and the courts continued to enforce it’ (Lefore, 2012:168). CDR refers to the Committee for the Defence of the Revolution.

⁴³ Yet, as Antwi-Bediako (2018) argues, it is important to move beyond a politics of blame that holds traditional authority solely accountable for uneven access to land. Where land is highly desired and contested, for many, it is a matter of acting first. Where unoccupied land is readily built upon and sand quickly extracted, there is a widespread fear of losing potential access to proceeds from both if action is not taken quickly. The process of removing occupants who encroach onto land or reclaiming value of extracted sand is long, expensive and with limited guarantee of a redeeming outcome. Thus, the sale of surface and subterranean leases may be read as a response to the widespread insecurity and contestation of land in peri-urban Accra more broadly.

those inhabiting the land, nor do they flow to the wider community, thus exposing the exclusive regimes through which sand turns to city and provoking a broader consideration of who has access to the geological riches of the [postcolonial] city. In many ways, this analysis fits with broader critiques of the extractive industries – particularly prized exports like oil – where, broadly speaking, revenues are seen to remain in the hands of both international and local elites. Yet, the extraction of sand also differs from these regimes in important ways. Firstly, sand mining remains an exclusively national pursuit, where Ghanaian companies organise the extraction of sand and, despite their uneven flows, revenues remain in the hands of Ghanaians. More significantly, I suggest, are the kinds of labours generated in and through sand, which differ considerably from the exclusivity of international extractive processes. In the next section, I discuss in greater depth the labours surrounding the movement of sand from pit to city. To do this, I first return to Awoshie Junction.

A TRIP OF SAND

Late one evening, once the elderly woman had collected the valuable waste from the space in front of the small row of shops at the junction, Cynthia began organising the remaining waste into a familiar pile. In what was an evening ritual, she gathered the day's redundant hair, plastic packaging and fish bones, into a corner behind a small container. Here, using a flame from the salon used to seal the ends of braids, she lit the waste and a thick black smoke soon emerged from the pile, drifting into the sky above and wrapping itself around the electricity wires that hung across the junction. Francis regularly passed the salon or Sadiq's shop on his way to and from his home. We would always greet one another and often, 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 sat watching this familiar fire, Francis expressed his anxiety about securing work. In the year that I knew Francis, work was unsteady. On this evening, for reasons I am not entirely sure of, Francis was no longer employed irregularly as a mate on Addae's truck. He would later make headway finding another truck, himself as a spare driver and Kwaku as the main driver, but this never came to fruition. Like many others, he was regularly seeking irregular work as a mate. Viewing the remnants of the sand station, Francis gestured to the other side of the road, pointing out a HOWO branded truck, laden with fresh sand. He said, 'some guy bought this truck and 2 more. \$85,000.00 US. If you buy a truck, you can make money'. I asked how this man may have earnt his money to buy three, to which he replied, 'in Africa, you can't ask someone how they get their money.'



Image 46 - Fire at the junction.

In comparison to those who owned the trucks, those working on the trucks were offered much smaller incomes which varied according to roles. As was explained, there is an owner of the truck, who assigns a caretaker, most commonly called the driver. Addae was the main driver. He would make 800 cedis a month, based on the premise that he would make 800 cedis a day in profit, 6 days a week. 'If you make 600 a day, you get 600 a month. If you bring 200 a day, you make 200 a month.' This also increases each year, projecting that a driver will make 800-900 cedis in the next year. The spare driver, like Kwaku or Yaw will not be paid anything per month, nor will the mate. Addae will pay the spare drivers and mates, but sometimes it is nothing, it depends how much money is made per day and this is dependent on the number of trips of sand.

A 'trip' of sand referred to the practice of going to and from the pit to collect sand. For the tipper drivers, this meant driving out to the pit, collecting sand and delivering it to site or station. The completion of pit to place of sale constituted a trip. Talking in terms of 'trips' was widely practiced by the tipper drivers, but also in the construction industry more broadly. A customer may request 'three trips of sand,' meaning a request of three truck-loads 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 allure a prospective buyer. For the tipper drivers, trips of sand were used as a way to calculate their costs and profits. In an explanation of this calculative procedure, 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 set in the context where the sale of sand stabilised at approximately 800 cedis per trip.

The image has been redacted for copyright reasons.

Image 47 - Di Nokore.

Francis worked as a mate and made irregular money. Unlike the main driver, who made a stable income every month, work and wages for mates were erratic. Income depended upon 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 can make nothing at all. Despite this, even as a mate, shifting sands around the city offered a way to make money in an increasingly saturated urban economy of selling goods and performing services. However, the demand for work on trucks was extremely high and it was difficult to affiliate yourself to a truck. Francis and Kwaku would relay a story currently circulating among tipper drivers, which involved a driver from Olebu station who, allegedly, had been collecting four loads of sand but reporting only three and 'pocketing' the extra cash. I was told that this news reached the owner, who proceeded to replace the driver with another unemployed driver at the station. The driver accused his replacement of spreading rumours about him, prompting general upset at the station. Francis explained that work can be hard to come by, so you must act faithfully towards your manager. Set within this context, I would later ask Francis who was responsible for inscribing the truck with *Di Nokore* – or 'be truthful' – to which he replied that Addae pasted the words across the truck to let the owner know that he was faithful, reliable and could be trusted: it was a matter of retaining employment. Meanwhile, Francis would explain, 'not every driver will cheat the owner. If the car owner is free with you, they won't cheat. But if you don't behave, then they might. It depends on friendship. You have to build a good relationship. It's about trust.' Thus, the insecurity of work produced an atmosphere of both anxiety and trust, making the shifting of sands a space of morality and an economy of ethics. This ambiguous element of trust would re-emerge in conversations later with Sadiq. In the context of discussing the lack of sales he had made in the day, he would often look out across the road and share his aspirations of owning a truck. 'If you buy a truck and you have an honest driver' he said, 'then you can make a lot of money.'



Image 48 - A view from inside.

On both the truck and at Awoshie Junction, Francis regularly discussed his aspirations to ‘go outside,’ by which he meant to leave Ghana. This reflected a broader sentiment in discussions with many young men I met, expressing desires to leave the country. Sadiq often recalled the experiences of his brother who had travelled to Dubai, as well as other friends who had risked their lives crossing the desert into Northern Africa and Europe – some of whom had not survived the increasingly fatal journey. The desire to leave Ghana was premised on the difficulty of finding well-paid work on a regular basis. Indeed, for Francis, making money in Accra was difficult. He had previous jobs, selling and performing other kinds of laborious construction work. He had attended Senior High School, however, this could not guarantee access to a secure job, given that, as I suggested, in Accra, university graduates experienced hardships in accessing regular, well-paid work. Francis frequently complained that Accra was expensive to live in, yet the city could not offer work that reflected these costs. Paying rent was particularly difficult, given it often required two years rent up-front – capital which many did not have access to at a given time. When rent was due, individuals would often call upon a network of family and friends to raise funds, expecting to be called upon in the future for a similar favour.

Even when work was secured on a truck, it was difficult and laborious. On one of my earlier trips, Francis and Kwaku recalled that they had been awake since 2am 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 at US\$85,000, I asked who had this kind of money. Francis replied that plenty of people in Ghana are financially capable of investing, largely politicians and businessmen. He said that the owner of this truck had a managerial position in a bank and owned as many as 11 trucks. The shifting of sands was thus structured by a distinct hierarchy of truck owners, managers, drivers and mates. While the shifting of sands presented job opportunities for some, the proceeds flowing from this work were unevenly distributed. Those with access to capital could acquire trucks and make considerable 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 he felt cheated by the broader social system in Ghana, to which his peers offered their agreement. 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 and Kwaku's renditions of working on tipper trucks expressed the broader sentiment that securing a livelihood in Accra was tough, uneven and the work secured often laborious. Yet the tippers were only one element in a more expansive sand economy. Indeed, the labours of sand were far broader, encapsulating a variety of spaces and individuals. Together, these broader labours of sand reflect the ways in which sand materialised 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.

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. Bringing sand from pit to city, they were, in many senses, city-makers. Labours at the sandpit also emerged as paramount to the production of the city. Operating machinery, performing administrative roles, driving motorbikes and loading sand were indeed a significant element in the sand economy. Of equal importance were the economies of consumption that shifted with the sands – the reproductive labour that kept the sandpit shifting. This labour was performed almost exclusively by women. Notable exceptions, however, were the elderly gentleman selling natural medicine and one or two men who frequently brought work boots and strong soled

sandals to the sandpits for sale. These women prepared food and sold items of clothing, shifting with the sandpit as it moved across the region.

The image has been redacted for copyright reasons.

Image 49 - Setting up market at the sandpit.

During the time I spent with *Piam*, some of these women would become familiar. Many followed the company pit to pit, preparing food like egg 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, or what was relayed to me as ‘chasing the flag.’⁴⁴ Other women would come from nearby villages, depending on the location of the sandpit that day, selling petrol, fish, clothes and shoes, hoping to make sales in these temporary spaces of consumption. For some women, selling in the sandpits was a better option than selling in the village or Accra, where rent was higher. Moreover, the sandpits offered an inflated economy, with a woman selling bread and drinks explaining, ‘if something is selling for 2.5 cedis, you can sell it here for 3 cedis. If it’s 3 cedis, you can sell it for 4.’

The image has been redacted for copyright reasons.

Image 50 - Displaying drinks for sale at the sandpit.

This kind of work, however, was hard. Over time, as I listened to women share their experiences of working in the sandpits, I would gain a sense of how these mobile sand frontiers were experienced. After finishing preparing egg, bread and tea, Ama would share her history of moving with the sands. She recalled how she’d been working in the sandpits for thirty years, having moved with them from places like Albekuma and Amasaman. ‘Back then,’ she explained ‘it was hand loading, everyone was using their hands. The trucks were smaller too. 10 years ago, the trucks changed and the machines came too.’ She explained that they 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 the sandpits with sustenance seemed to stress the embodiment of these frontiers. On

⁴⁴ The use of the ‘flag’ here refers to the flags planted at the roadside to signal the locations of sandpits.

the ground, these feminised reproductive labours emerged as paramount to producing mobile economies that enabled companies like *Piam* to shift the sandpit. These hard labours performed by women in the sandpits, from the outside, tended towards invisibility.



Image 51 - Making sales.

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 fuel from *gao gao*⁴⁵ petrol stations nearby, where petrol was stored in containers and distributed to vessels via a hand pump. At the city's limits, formal petrol supply was limited and thus *gao gao* petrol stations were important institutions in the sand winning economy. The fuel was carried in yellow vessels that had long been politicised as 'Kufuor gallons.' These gallons, which would have once carried *Frytol* became synonymous with John Kufuor's ruling years (2001-2009), marked by depleted water supply in Accra. During this time, they functioned as containers for collecting, transporting and storing water sourced from various points of supply in the city. In their newest lives, the containers had emerged as artistic spectacles in the work of Serge Clottey, where they morphed into high-end sculptures that hung from the walls of the new *Kempinski* in downtown Accra. Now, as I watched the yellow vessels transport petrol to bulldozing machines, they seemed to embody yet another life in these sandy landscapes. They were the vessels that kept things in motion, kept the sandpit shifting and kept the city supplied with sand.

⁴⁵ A name given to informal petrol pumps, deriving, I was told, from a name of petrol pumps in Northern Ghana and neighbouring countries on the northern border. Gao is the name of a town in southern Burkina Faso.



Image 52 - Gao Gao petrol station on the road to Hobor.

At times, men occupied the very edges of the sandpit, collecting sand with a shovel and loading the material into small carts attached to a moped. This, I was told by Piam, was ‘allowed.’ They were likely living close by and building something for themselves. Indeed, an employee explained that so long as they don’t bring large trucks, it’s generally allowed, proclaiming it was Piam’s ‘social responsibility.’ Young boys also shifted with pits, evening out the temporary sand roads with shovels, hoping that a tipper driver may hand them a few cedis. Thus, beyond claims to ownership or compensation, the sandpit leaked into its surrounds and its surrounds leaked into it. In this way, the sandpit was more than just a space, it was an event. A moment in time where, through multiple means, value could be extracted from the otherwise exclusive transactions of sand.

These economies existed in stark comparison to parallel extractive industries. One afternoon, Mr Osei asked me if I’d visited the stone quarries nearby. I had, on two separate occasions, joined the tipper drivers on their trips to a stone quarry. Though more often than not Francis and Kwaku delivered sand, at times, upon request of particular clients, they collected stones from the quarry and delivered them to points of sale. The quarry was located just beyond the regional Accra border, in the neighbouring Eastern Region. It was an entirely different space to that of the sandpit. The quarry was a mass of grey material and heavy static machinery. Its backdrop was dominated by a cliff face, which through a process of capital intensive mechanisation, was transformed into grey aggregates to be sold in various sizes, ranging from quarry dust to 38mm stones, suitable for high quality roads and buildings. Devoid of people, it exhibited an eerily quiet atmosphere in comparison

to the bustle of economic activity at the sandpits. It was a monitored space, bound by a fence which delimited its territorial edges, preventing groups coming to sell goods or take materials. Signposts to a small office were written in Chinese, confirming what had already been relayed to me: unlike sand winning, many quarries were Chinese-owned. Francis and Kwaku loaded the truck with stones and we exited the site, paying 688 cedis for the material, which was a significantly steeper fee than the 200 cedis paid for sand. After we delivered the stones to a construction site in Sowutuom, Francis announced that ‘the quarry stones are for people from China and Italy, the white people who bring the machines. The sand here, that is for Ghana.’ Thus, the sandpit was a different kind of space to the stone quarry, reflecting the contrast between sand mining and Ghana’s extractive industries more broadly, which, as Francis pointed out, tended to be operated by foreign capital. Moreover, as I had seen, unlike the stone quarry, the sandpit was not a space of extraction with delimited boundaries of labour. Rather, the shifting sandpit was deeply embedded in an expansive economy which stretched beyond the immediate boundaries of the pit.

The image has been redacted for copyright reasons.

Image 53 - Stone quarry in the Eastern Region.

Thus, the shifting sandpit can only be understood in relation to a broader set of labours. These range from providing sustenance to sand contractors to simply claiming sand from the edges of the pit. Either way, the shifting sandpit was a place in which value – be that sand or money – could be extracted in a situation otherwise marked by exclusive transactions between land owner[s], contractor and tipper driver. Indeed, unlike the exclusive spaces of the stone quarries, the extraction of open pit sand presented a space where value was both improvised and extracted. This process of extraction was also apparent once sand left the pit and moved toward the city on tipper trucks. In the next section, I discuss the extractive economies embedded in the shifting of sand, which I suggest may be most aptly expressed through the figure of the pothole.

The image has been redacted for copyright reasons.

Image 54 - Selling clothes at the sandpit.

POTHOLES

Sand is a material that must be transported from the pit to the city in ways that respond to the shifting locations of the sandpit. The tippers were responsible for responding to the geographies of the shifting sandpit, following the flags which were re-positioned almost every day. Thus, while

tippers generally moved in similar directions, each day, as they both collected and delivered sand to points of sale, the trip's 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 I moved with the tipper drivers, the more this unfolding field of interactions emerged as a significant site for the extraction of incomes, beyond the landowner, contractor, tipper driver and consumer and these relations emerged as integral to the way in which sand became part of the life of the city. Indeed, moving with the tippers exposed the ways in which the shifting of sands presented a platform through which value could be extracted by multiple parties, tying together people and spaces as sand moved across Greater Accra. Here, as sand circulated from pit to city, it remained as sand. Yet, once sand left the pit, its movement opened-up a field of possibility for engagement, exchange and value extraction. I suggest that these practices hint at the realities of urban work in Accra more broadly.

Early in our meetings, I joined Francis and Kwaku on a trip to the pit. Driving through Ashalaja, we headed north-west, towards the boundaries with the eastern part of the Central Region and the southern part of the Eastern Region. With little space to curve around its edges, we dipped into a deep depression on the road. As we rose, the truck rattled and we regained our balance. Francis said that the HOWO branded trucks we were in, were good for the roads out here, since their components are constructed with a significant degree of suspension, giving them the capacity to dip and dive across the uneven roads. Imported from China, he explained, these trucks began appearing on the roads around seven years ago. Prior to this, the most widely used trucks were European or American. These trucks were expensive, and while their engines endured for a long time, they moved with limited mechanical spring, making them vulnerable to snapping upon frequent stress. The HOWO trucks would most likely encounter engine failure within 4-5 years, he explained, but within this timeframe, they required little maintenance and could get the job done. The potholed roads he described were those at the edges of Accra, where funds may be less likely to be directed and timeframes for repair and general maintenance were understood to be longer. Moreover, it was widely recognised that sand trucks were in part to blame for the poor condition of the roads, burdening the concrete with tonnes of grains year upon year.

Potholes were significant in shaping engagements as sand moved from pit to city. We regularly passed men and women moving sand and gravels to fill both deep and shallow depressions on 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 them small,' he said. 'But not always.' This practice was visible on roads close to places 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. This practice even extended to the temporarily carved out sand roads which connected the concrete roads to sandpits in fields. Here, young men eagerly shovelled sand from the unsteady road in attempts to retain a flat grainy surface. Sometimes a truck driver handed a few cedis to them and sometimes the sand contractor offered them some money. Either way, receiving an income for their service was not guaranteed and represented a speculative form of work sought to extract potential value from the movement of sand. At times frustrated at this uncertainty, young men may occupy the roads more demanding, explicitly requesting money from drivers, while steadily holding a baseball bat. On one particular occasion, clearly frustrated about the ability of drivers to drive around the potholes and pass without payment, young men had moved a large branch from a nearby tree and placed it across the road, preventing any vehicle from passing without stopping and engaging in some form of [monetary] exchange. These practices highlight the ways in which sand interacts with the socio-material landscapes of the urban region, presenting a moment where value could be extracted by those otherwise excluded from the transactions of sand.

The image has been redacted for copyright reasons.

Much like De Boeck and Baloji's (2016) rendition 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 infrastructure [which] 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 in a conversation surrounding infrastructure more broadly, they write that 'the syncopated rhythms that Kinshasa's material landscapes, with its physical condition punctuated by constant breakdown, lack, paucity, failure, recycling and repair, imposes on its denizens, in turn also generate new possibilities and opportunities, as well as different kinds of spaces' (ibid, 108). This urban 'syncopation' then is read as presenting both limits and opportunities, yet remains significant in our understanding of how the city is lived. Indeed, in this reading of this

Image 55 - Counting trucks at the sandpit.

‘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 lives of shifting sand, perhaps the most extreme form of syncopation centred on a collapsed bridge near to Ashalaja. The story this syncopation unfolded on one of our earlier trips of sand. Following an uneasy journey over rough road, we passed onto smooth terrain, in front of which lay a steel bridge stretched out ahead. Running parallel to us, Francis pointed to a dislocated steel structure which hung precariously over the Densu River. It was the bridge that had formerly served as the passage from Ayikai Doblo to Ashalaja, but had collapsed in a fatal accident in 2015. Gradually tested by the weight of sand-loaded trucks, the structure had surrendered 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 at Awoshie Junction, Francis recalled the makeshift bridge that was constructed during the time that the new bridge was being built. As I was told, 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 it to level with the road either side of the river, allowing one lorry at a time to pass. When the water took the sand away, Francis elaborated, they had to keep bringing sand to level it out. Francis explained that

‘you would pay 20 cedis when you come back from the bush with your sand. When you go four times, it was 80 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 was it 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 sand. In this narrative, the shifting of sand made, unmade and remade the city in its image. In doing so, it gave rise to moments where the transactions embedded in sand could be rewritten, even if only temporarily.

The previous chapter ended with a reading of the sandpit as a ‘postcolonial hole’ (De Boeck and Baloji, 2017). I argued that while governed by a postcolonial politics of land, geological relations and shifting ecological conditions, the shifting sandpit offered a moment where power may be contested,

nature may retaliate, the rules may be inverted and new claims to the subterranean may surface. It is to this end that I situated the shifting sandpit as an 'aperture, an opening, a possibility' – or indeed, its own kind of postcolonial hole (De Boeck and Balaji, 2017:151). In this chapter too, it seems apt to extend the analysis of sand to include a broader set of postcolonial holes, which may help us understand more about the ways in which the shifting of sand functioned as a platform for exchange. Transforming the socio-material landscape of the region as it moved, generating and engaging with a series of syncopations, the shifting of sand presented a moment where value could be extracted, the terms of exchange could be remade and new possibilities could come to the fore. Tracing out the empirical details of sand as it moved from pit to city works to expose the extractive processes that extend beyond the sandpit itself. In this account, claims were stretched, from providing a service, to literally being present at the roadside and making a demand.

Thus, together, the broader labours of sand surrounding both extraction and transportation expose an extended extractive economy beyond the immediate labours of the pit. Here, these many labours expose the terms through which sand is urbanised, or indeed, brought into the remit of the city, prior to its materialisation as urban building blocks. Yet, they also tell us about a potential politics embedded therein, a discussion to which I now turn.

A RIGHTFUL SHARE

The many labours embedded in the expanded sand economy 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 demanded to make a living in an economy where the 'market is not good.' At Awoshie Junction, Sadiq often lamented the limited number of phone cases, accessories or chargers sold in a day or week, complaining that the 'place was too hot' - meaning people were not buying and selling and he faced a state of impending stress. In this way, the broader extractive economy of sand exposed but another perspective on a difficult life in the city. However, beyond improvisation, perhaps the most revealing facets of this extractive economy were the practices less determined by the creation of a service, but rather something closer to a demand. Indeed, watching the young men simply take sand from the sandpit or demand money from a tipper on a potholed road hinted at a different kind of extractive practice: a distributive demand to the values flowing from sand, from which they were otherwise excluded.

The image has been redacted for copyright reasons.

Image 56 - Sandpit spectators.

In his 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' (2015:183). In this reading, the vast mineral wealth that undergirds the economies of Southern Africa are reconceptualised as awaiting distribution among the region's inhabitants. Ferguson argues that as opposed to 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). Though at entirely different scales and degrees of mineral wealth, Accra's sand economy points to a set of distributive claims. Indeed, though tentative and unrealised, the broader remit of sand's economy brings in to view the possibilities of an emergent politics of a rightful share: a rightful share to the unfolding wealth of a city from which many find themselves increasingly excluded. Drawing together the empirical insights from Accra's sand economies and Ferguson's political suggestions, I redeploy extraction as a term to capture a mode of practice for both improvising, and significantly, *demanding* value from a flow of resources. 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, together mark a different kind of *claim* on the values flowing from sand. It is these kinds of claims and demands that I re-deploy together as *extractive practices*.

In many ways, these practices are perhaps not unique. In Watts' (2004) analysis of oil drilling in the Niger Delta, for example, he details the sometimes violent means through which oil wealth is extracted and redistributed to local communities, often through a constellation of chiefs, youth groups, companies and security forces. Equally, as I later discuss in chapter six, extracting sand in Accra without licenses, sometimes through violent practices, can also be considered a claim on the values embedded in sand. To complicate matters, moreover, in Accra's sand economies, claims were not simply made upon the governing elite or the global economy, but rather manifested in claims made upon local land owners, the immediate natural environment and other inhabitants of the city – for example, those repairing roads making claims on tipper drivers. This tells us about the kinds of economies that remain close to the lives of Accra's inhabitants, the transactions of which present opportunities to generate a wider set of income streams for a broader set of city dwellers. Indeed, the kinds of revenues flowing from sand, in no doubt, pale in comparison to those potentially extracted from oil, however, due to the leaky nature of the sand economy (at both pit and on the road), these potential revenues remain far more amenable to the extractive practices of the region's

inhabitants than those embedded in oil. This chapter does not seek to advocate these kinds of practices as a solution to the gross inequalities embedded in a set of historically produced and presently unfolding processes, but rather seeks to acknowledge the full range of claims being made on sand as it unearthed and transported across the city and the kinds of political potential these demands may render visible. This acknowledgement, I argue, assists us in moving beyond romanticised tropes of urban resilience and instead generates space for thinking through political demands – or indeed, a different kind of politics of extraction.

From here, I suggest we move beyond the extractive industries to consider extractive practices as a broader kind of political demand. Indeed, an obvious point of departure for thinking about a rightful share in Accra – and the nation more broadly – would be to begin with redistributing the revenues flowing from Ghana's recently discovered off-shore oil, which has in significant part contributed to Ghana's ranking as the world's fastest growing economy (IMF, 2019). However, with the intensity of climatic events predicted to increase over the coming decades and the growing urgency to set in motion post-carbon futures, it is paramount to look beyond the carbon present and consider different forms of value production from which a new politics of extraction could be realised. In a conversation with a board member of the John A. Kufuor Foundation – an establishment which seeks to build 'well governed and economically sustainable societies in Ghana and Africa'⁴⁶ – his remedy to the urban question of sustaining life in the continent's rapidly growing cities, lay, rather contradictorily, embedded in agriculture. More specifically, he advocated for the production of locally grown rice, which would not only employ a huge number of people, currently struggling to eke out a living in the country's growing cities, but would also reduce dependence on expensive rice imports from countries like Vietnam and offer long-term health benefits to the nation. This could be one of many options. However, it ignores the powerful desires for urban life and its association with both modernity and success that continue to undergird urban expansion to a significant degree. Moreover, the kind of politics of the rightful share and income demands both Ferguson and Accra's sand economy hint at, expose something more radical than simply a different form of employment beyond the city. Exactly how value could be created beyond extractive resources in an economy increasingly structured by raw materials remains open to debate, however, I suggest, that taken outside of the realms of the structural inequalities and hardship outlined here, the kinds of improvisation, re-use and repair practices detailed in this chapter, may offer a hopeful glimpse at the possibilities of new kinds of value production, different kinds of political-geographical relations and emerging demands therein.

⁴⁶ 'About Us' (kufuorfoundation.org, 2019).

The image has been redacted for copyright reasons.

Image 57 - Sisters at the sandpits.

THE URBAN FUTURES OF EXTRACTION

This chapter opened with an extended account of the lives and livelihoods of a set of individuals at Awoshie Junction. Here, Cynthia, Winfred, the pure water sellers, the waste collector and Francis, all shared something in common: an attempt to make a life in Accra. Set within these challenges of securing an income in the city, I detailed the ways in which sand becomes a livelihood strategy for an expanded group of individuals beyond the immediate transactions of extracting, buying and selling sand. I suggest that these labours expose the terms through which sand becomes urbanised – that is, brought into the remit of the city – prior to its materialisation as built form. More specifically, the expanded labours at the sandpit, alongside those that take shape as sand moves from pit to city, expose how sand emerges as a platform for exchange, engagement and ultimately the extraction of value. Performed by men and women, both young and old, these labours stretch our understanding of existing extractive economies, meanwhile presenting an opportunity to redeploy the meaning of extractive practices more significantly. In this light, using Ferguson’s engagement with the new welfare states of southern Africa, I suggest that the extractive economy of sand exposes a potential politics of a rightful share to the values embedded in nature and the city. I do, however, move beyond the idea of extraction as delimited by the extractive industry, and consider it as *a mode of practice for both improvising, and more significantly, demanding value.*

With this discussion in mind, looking to an urban future, 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 crystallises unequal power relations in expanding urban regions of the world (Simone and Pieterse, 2017), what kinds of living could be sustained in cities of the future? At the chapter’s outset, I presented a series of questions for thinking about what claims to an urban income and a flow of resources may look like in a contemporary city. I suggest that the economies of sand I have presented here hint at some tentative directions for reimagining claims to urban living. Indeed, by thinking through extractive practices as a broader kind of political demand, I suggest we are drawn to consider the political possibilities embedded in distributive claims emerging in cities across the planet.

In this vein, I end where I began, at Awoshie Junction. Sadiq’s glass cabinet sat precariously on three planks of wood which stretched over the gutter, separating the main pavement from the set of shops where I had been invited to sit. He had recently fought to remain in place, as the local government

argued the space he had created and now occupied, belonged to the state. Like any other evening, Sadiq had hooked up an electricity connection to his glass cabinet, where his modest set of items would glow among the city lights. Later that night, a gust of wind and a wrong footing on a piece of wood further down the gutter unbalanced his cabinet, causing it to rock and eventually fall to the ground, smashing to pieces. With limited funds to purchase another cabinet, he would have to call upon his brother and friends to raise enough money, simply to recover his existing position. As Sadiq pieced together the small bits of the cabinet that remained salvageable, the piercing lights of the church seemed brighter than ever and the Menzgold⁴⁷ advertisement loomed larger over the junction. What could a new politics of extraction look like here?

The image has been redacted for copyright reasons.

Image 59 - Selling petrol at the sandpits.

The image has been redacted for copyright reasons.

Image 58 - Presence.

⁴⁷ Menzgold is a Ghanaian gold dealership and investment company. It has recently come under scrutiny following the non-repayment of owed funds. I discuss this in the opening chapter.

THE ANXIOUS ANTE-LIVES OF URBAN FORM: SAND, SUSTAINABILITY AND SECURITY

Anxiety /əŋ'zɪəti/ *noun*

1.

strong desire or concern to do something or for something to happen.

Similar: eagerness, keenness, desire, impatience, longing, yearning

2.

a feeling of worry, nervousness, or unease about something with an uncertain outcome.

Similar: worry, concern, apprehension, apprehensiveness, consternation, uneasiness, unease, fearfulness, fear, disquiet, disquietude, perturbation, fretfulness, agitation, angst, nervousness, nerves, edginess, tension, tenseness, stress, misgiving, trepidation, foreboding, suspense

NOSTALGIA FOR AN URBAN FUTURE

Sat upon a plastic chair in the quarters of Cynthia's family home in Somanya – a small town in the Volta Region – Sadiq studied a small plot of vacant land. He turned to me and concluded, 'if this piece of land was in Accra, it would be taken.' Following this appraisal, he expressed his own desires to own a plot of land in Accra. Here, he explained he would purchase concrete blocks and begin the long and arduous task of building a single storey house. This was a future he was anxious to secure and motivated his early starts at Awoshie Junction, his strict savings regime and his anxious pacing of the city to bring electronic goods to his cabinet that could offer the largest profit margins. Sadiq was not alone in his longing for a plot of land and a concrete home, and together this almost universal desire exhibited a certain kind of nostalgia for an urban future – to rephrase Piot (2010). These desires prompted an anxious unearthing of sand to meet this concrete demand. As an official at GSMA expressed, 'the rush for land and the rush for sand go together.' Yet, while embedded in the personal anxieties of individuals like Sadiq, this rush for sand was also implicated in the production of a vast set of interconnected anxieties that spanned the city, the state and the planet. Indeed, as sand was brought into the realm of the city – or indeed, urbanised – it gave rise to a vast set of anxieties that found themselves connected in uneasy constellations. In this way, I argue that the urbanisation of sand may be best captured through anxiety's double meaning: as both a longing *for* and an apprehension *of*. From concerns surrounding the future durability of concrete cities, the degradation of the environment, to the widespread loss of farmland and illegal sand winning, I suggest that anxiety allows us to talk across multiple dimensions of sand's position in Accra, opening up a way of seeing the city that captures the uneasy transformations that undergird its material production. I show how the anxieties embedded in the urbanisation of sand haunt people's daily lives and thoughts, torment the city's peripheral lands and their inhabitants, and plague the state's attempts to govern both extraction and urban territory more broadly. In this way, I contribute to a

disparate literature on anxiety in the African city, proposing a view of anxiety which is grounded in the anxious making, unmaking and remaking of Accra's shifting landscape.

The chapter begins with a discussion of anxiety and African cities, thinking through the contemporary and historical anxieties projected onto urban spaces across the continent. I present a brief selection of more recent academic work which departs from these readings and suggest that a rendition of the anxious city through the prism of sand may have much to offer in re-positioning the meaning of anxiety in a contemporary African city. In doing so, I turn to a discussion of the concerns surrounding the quality of building blocks, environmental anxieties and illegal sand mining. Through these analyses, the chapter captures the unease through which sand is drawn into the city, in this way exposing the anxious ante-lives of urban form.



Image 60 - Windows of the world.

ANXIETY AND THE AFRICAN CITY

In March 2018, more than 3000 people gathered in the streets of Accra to protest the Ghana-United States Status of Forces Agreement – a proposal made by the US Department of Defense to the Government of Ghana, which would expand the role of the US military (New York Times, 2018).⁴⁸

⁴⁸ 'Deal with US Military Sets Off Protests in Ghana' (nytimes.com, 2018).

Specifically, it proposed an investment of \$20 million in equipment and training for Ghana's military, the practice of joint exercises and the use of the country's runway and radio infrastructure. While the government argued that it merely re-secured an existing set of agreements with the US, for many Ghanaians, the proposal was interpreted as an undue extension of US military might: the precursor to the permanent stationing of American troops on Ghanaian soil and a threat to national sovereignty more broadly. This anxiety of being colonised by a military superpower could not be separated from the anxieties of the US itself, which are increasingly attuned to the perceived threats from West Africa. The fact that in 2018, in Burkina Faso alone, a total of 137 attacks were conducted by Islamic State, Al Qaeda affiliates and splinter groups, has contributed to this perception, while terrorism groups are seen to be increasingly operating beyond the Sahel region and drifting into coastal West Africa (New York Times, 2019).⁴⁹ The attempt to strengthen existing relations with Ghana, with a view to extending military presence if necessary, in one of the region's most stable democracies, fits well within this discourse of an anxious West Africa.

Significantly, this regional threat is increasingly viewed through the prism of cities, with the US Army releasing a 2014 report entitled, 'Megacities and the United States Army: Preparing for a complex and uncertain future.' Opening with a quote from Robert Kaplan on the 'coming anarchy' of the world's growing megacities, next to an image of Lagos, Nigeria, the report depicts a dystopian urban future, writing that:

'As resources become constrained, illicit networks could potentially fill the gap left by over-extended and undercapitalized governments. The risk of natural disasters compounded by geography, climate change, unregulated growth and substandard infrastructure will magnify the challenges of humanitarian relief. As inequality between rich and poor increases, historically antagonistic religions and ethnicities will be brought into close proximity in cities. Stagnation will coexist with unprecedented development, as slums and shanty towns rapidly expand alongside modern high-rises' (US Army, 2014:4).

Arguing that megacities offer a 'safe haven for threat groups who wish to strike the U.S. homeland,' while also citing the role of cities in granting access to critical resources – including Nigeria's oil which is exported through Lagos' port – the report situates the megacity as a future strategic site for US military presence. Thus, the report argues rather definitively, that 'it is inevitable that at some point the United States Army will be asked to operate in a megacity' (ibid, 3). With a set of case studies on megacities around the world, including Bangkok, Sao Paulo and Dhaka, the report turns to Lagos. Here, the document argues that the security of Lagos – and thus by extension Nigeria – is 'important

⁴⁹ 'Burkina Faso Racked by Escalating Violence' (nytimes.com, 2019).

for maintaining the fragile security of all of West Africa,' suggesting that while terrorist groups like Boko Haram have yet to 'infiltrate' Lagos, this is a particular concern for the future (ibid, 19). In this way, the intersection of looming threats in the West Africa region and the concerns embedded in megacities more broadly, serves to position the African mega/city as a significant space of anxiety in the US' global map of in/security.

This urbanised rendition of the security-development nexus has gained traction in international policy circles beyond the borders of the US, particularly through the UN, which released an article on the growing interface of peacekeeping and cities. Citing examples from across the globe and Africa more specifically, the report points to the 2015 hostage situation in Bamako, Mali and the daily deaths in Bangui, Central African Republic, where the interim Prime Minister proclaimed that the state of affairs had 'gone beyond a peacekeeping operation, it is now urban warfare' (quoted in Bosetti et al, 2016). These brief discussions hint at a set of anxieties that are projected onto Africa's cities, which together, remain positioned in a context of unprecedented rates of urban expansion. These projections have sparked a set of broader anxieties about the crisis of African urbanisation and the growth of unknowable, unplannable and ungovernable cities across the continent. The contours of this anxiety are aptly captured through the hysteria that ensued following the spread of Ebola into the coastal city of Monrovia, Liberia, in 2014, where the virus was predicted to flourish in the close quarters of the city's slums and pose a threat to the international community.

In many ways, the African city has long been a site of projected anxieties. In the British colonial cities of southern and eastern Africa, the ruling government feared that 'city life would "detribalize" Africans and foster anticolonial solidarities' (Davis, 2006: 51). With these urban anxieties in mind, through a series of pass laws and vagrancy ordinances, the British denied native groups access to the rights of land ownership and permanent residence, instead tolerating populations as temporary labour forces (Myers, 2003). The colonial city was also haunted by the anxieties of disease and disorder and the threats this posed to the undoing of the colonial project (Njoh, 2008a, 2008b; 2009). In Accra, for example, in convulsion with racist imperial ideologies, these anxieties shaped the colonial government's attempts to reshape the city aligned with 'sanitation, order, and racial segregation' (Parker, 2000:195). Yet, this remained a project beset with angst, given that the government's desires to demolish the old towns in downtown Accra were never realised. Indeed, as Parker writes, '[d]espite bursts of action, such as in the aftermath of an outbreak of yellow fever in 1911, the fear of overt resistance in the heart of the colonial capital nevertheless prevented the systematic demolition of the old towns' (ibid, 199). Together, these anxieties specific to the African city bespeak the broader set of anxieties that haunted the European colonial project (Fischer-Tiné

Beyond the security-development nexus, more contemporary analyses have deployed anxiety as a mode through which to capture a variety of processes in African cities. Indeed, authors have positioned the circulation of fear in South Africa's cities through anxiety (Durrington, 2009; Lemanski, 2004; Bremner, 2004), while Watson (2014) points to the growing number of speculative projects across the continent, which radically depart from the grounded realities of the cities they co-opt. In ethnographies of Kinshasa, De Boeck and Plissart (2004) and De Boeck and Baloji (2016) re-write the anxious spiritual and material realms of the city through means of invisible worlds and apertures, while Simone (2004) shifts the vantage point of African associational life in cities from one of unpredictability to productive provisionality. In this chapter, I seek to contribute to this existing work on ethnographies of urban anxiety through the prism of sand. I show that in Accra, the urbanisation of sand is beset with a series of anxieties that haunt the city's inhabitants, the state and the planet. By using sand as a way to ground anxiety in the specificities of contemporary urban life, I offer a reading of an urban anxiety that circulates across the space and temporalities of a growing African city, detailing an interconnected web of anxious reverberations across the shifting urban landscape. Ranging from the future durability of concrete cities, the widespread loss of farmland and the degradation of the environment more broadly, alongside the illegal unearthing of sand, I show that these spaces, scales and temporalities of anxiety remain interlocked in important and sometimes contradictory ways.

FUTURES SET IN CONCRETE?

During the first 'trips' of sand with the tippers, it was hard to miss the significant number of roadside enterprises selling building blocks. Often next to signs reading 'blocks for sale' and 'buy blocks here,' piles and piles of blocks awaited sale, while others dried in the sun next to the machines which, through a series of hard labour, transformed sand, water and cement into future urban form. Looking out of the truck, I commented on what I thought were a high number of these enterprises. Kwaku replied, 'yes, the block factories are increasing, but they are not the quality ones.' Following my enquiries, he explained that, alongside the quality of sand (marine vs. inland sand, for example), the quality of blocks vary depending on the ratio of cement and sand. Blocks with high cement to sand ratios were of higher quality than those with smaller ratios. He suggested that while factories were growing in number, they were more likely to be producing low quality blocks, made of mostly sand and bound together with limited cement inputs. These factories would be selling blocks at a lower price, often closer to the very edges of the peri-urban. Despite these differences, it remained unclear which blocks were of high quality and this was an anxiety that other potential consumers had expressed to me, explaining that this fear motivates people to make their own blocks on site. This

practice they felt would ensure the production of high quality, durable blocks for their homes or commercial structures. I often joined Kwaku and Francis on their deliveries to sites where the blocks would be made and plot owners had employed a small group of men to perform this labour. This practice was not without unease, however, given fears of being ‘cheated’ by those employed, most likely, it was suggested, by making poorer quality blocks and re-selling bags of cement elsewhere. Indeed, Kwaku reiterated, ‘[i]f you are not in a rush, you can oversee it,’ if not, ‘they will cheat you.’ Other factors prevented individuals from building blocks on site, including the cost of labour, the cost of machinery and the time needed to oversee their production. Meanwhile, the possibility of buying large quantities of blocks as quickly as possible was desirable in a context where building at speed was regularly used as a strategy to secure land. As was repeatedly relayed to me, once you buy a plot of land, ‘you need to build something quickly, or someone else will buy it and build.’ In this way, these factories may be read as responding to a desire for quick, cheap and plentiful blocks, appealing to what Choplin observes as a positioning of the cement block as ‘the new gold bullion for the poor’ (2019:12).



Image 61 - Concrete futures?

Yet, what kinds of anxieties are set in motion by the building of cities in this way? What kinds of inequalities are literally cemented at the urban edges of cities like Accra? What kinds of urban futures are made im/possible? In Oteng-Ababio’s (2012a) analysis of building in Accra, he points to the otherwise ‘neglected vulnerabilities’ in Accra’s landscape, detailing the risks posed by seismic activity to buildings constructed out of low quality materials. Writing against what he identifies as the

‘overconcentration of attention on the economic processes of building, like the registration and permitting...rather than...the quality of building materials and the structure,’ he points to the potential risks of building with low quality blocks in the context of ongoing seismic risk in the city. He finds that, contrary to the National Building Regulations, which pits a standard cement to sand ratio at 1:6, the blocks from his sample of buildings across suburban and peri-urban Accra exhibited ratios of up to 1:11 (ibid). Meanwhile, upon a visit to a block factory, he found that some enterprises were using one bag of cement to produce 35-40 blocks, instead of the recommended 15 or 20. In my own visits to block factories in the surrounding spaces of Ashalaja, operators explained that one bag of cement, costing 30 cedis at the time, would produce at least 30 blocks. They would be sold at two cedis a block, or 1.8 cedis if the customer can provide their own transportation. The low cement content of these blocks also raises questions about the volumes of sand required to build these blocks, given that less cement inevitably means more sand.



Image 62 - A walling unit on governemnt reservation land.

The findings of Oteng-Ababio, alongside my own research, point to concerns regarding the low material quality of cities that, together, present future threats to their inhabitants. This may also be more likely following increases in the price of cement, where, seeking to maintain profit levels, block factories may opt for even lower cement to sand ratios, while individuals with limited funds may too, seek to reduce cement input. In 2019, cement prices increased twice in just two months, with Ghacem’s products increasing from 30.47 cedis to 32.47 (Super Rapid) and from 31.68 to 34.18 (Extra). Meanwhile, Dangote’s 42.5 grade cement increased from 32.55 to 35.55 cedis.⁵² Reports

⁵² ‘Ghanaian cement prices rise for the second time in two months’ (cemnet.com, 2019).

indicated that price hikes were the outcome of an increase in the cost of raw materials, following the depreciation of the cedi. Indeed, without integrated plants to produce clinker (heated limestone and clay), companies like Ghacem import this material, which is then crushed and mixed with gypsum (a soft sulphate mineral) in grinding plants, which in turn produces cement. Thus, the cost of producing cement is closely related to the price of clinker, which, as an import, remains closely linked to the national currency. Any increase in the cost of clinker will translate to prices of cement and this has the capacity to influence the quality of blocks produced to build the expanding city. In this way, the quality of the self-built homes of peri-urban Accra is closely related to the anxieties of the national economy more broadly.

The anxieties related to the quality of blocks in Accra speak to a growing set of fears regarding concrete cities the world over. In Beiser's analysis, 'perhaps the most frightening aspect of our dependence on concrete is that the structures we build with it won't last' (2018:223). Indeed, far from a more permanent building material, concrete 'fails and fractures in dozens of ways' (ibid, 224). Listing the high percentage of America's roads, bridges and dams in need of replacement, Beiser exposes the short lifespans of concrete structures and their likely need of rebuilding in the near future. Turning to the global south, where he suggests building standards are much lower and regulations are harder to implement, he warns of the short temporalities of the concrete cities currently under construction. Of great concern is the use of sea sand in the production of concrete, which corrodes rebar and severely weakens structures. This, he argues, was implicated in the deadly collapse of dozens of buildings in Haiti's 2010 earthquake. Alongside concerns surrounding the use of coastal grains, Beiser points to the low-grade quality of cement, where in China, some 30% of cement produced is so low-grade that it is giving rise to 'dangerously flimsy structures known as "tofu buildings"' (ibid, 230). More broadly, he draws on estimates from elsewhere which suggest that 'as much as 100 billion tons of poorly manufactured concrete – buildings, roads, bridges, dams, everything – may need to be replaced in the coming decades. That will take trillions of dollars, and billions of tons of new sand' (ibid, 231). Indeed, many of the concrete buildings today will begin a process of disintegration within fifty years. 'In short,' he writes, 'we have built a disposable world using a short-lived material...We have built our world out of sand in the form of concrete – and it is starting to crumble' (ibid, 231). In cities like Accra, where incomes are low, self-building is the norm and regulations are difficult to implement, what kinds of cities are taking form? Who will pay for ongoing maintenance of these structures, given home builders often leverage a substantial part of their incomes on building in the first instance? What kinds of risks will be posed and to whom, by present and future climate events, such as flooding? The fact that many of these questions do not command easy responses, suggests that the construction of Accra out of potentially low-grade materials undermines the production of sustainable urban worlds. Thus, as opposed to a robust set

of urban futures – that the concrete edges of peri-urban worlds may indicate – I suggest that the concrete worlds of the urban poor and middle classes in Accra signal a kind of ‘illusion of development’ (Coronil, 1997).

Meanwhile, the construction of concrete cities has come at a huge cost. As Beiser elucidates, turning limestone into cement emits carbon, while the furnaces of cement factories burn huge volumes of fossil fuels. Indeed, in a recent report by the Carbon Disclosure Project (CDP), research exposes that cement production is responsible for 6% of the world’s carbon emissions, second only to the production of steel (Kisic et al, 2018). In a brief of the research paper, the CEO of CDP writes, ‘[c]ement is a heavy and largely invisible polluter, yet taken for granted as a necessary building block of basic civilization’ (CDP, 2018). The continued expansion of urbanisation rates across many regions of the global south and the need to build affordable housing, presents serious challenges to meeting the targets stipulated in the Paris Climate Agreement, which seeks to maintain a global temperature well below 2 degrees Celsius above pre-industrial levels. While some of the largest cement companies may seek to reduce their emissions in the coming years, in many ways, this could be offset by the growing emissions from cement companies like Nigeria’s Dangote, who proudly proclaim an ambitious expansion plan across the African continent. In this way, sand’s urbanisation is intimately linked to unfolding global environmental anxiety. This dynamic poses demanding and ethically challenging questions: how can we build cities for the world’s rapidly expanding urban population in ways that remain conducive to more sustainable planetary futures?

ECOLOGICAL ANXIETIES

In many ways, these concerns speak to the growing anxieties surrounding attempts to secure sustainable urban futures more broadly. Goal number 11 of the UN’s sustainable development goals seeks to ‘make cities inclusive, safe, resilient and sustainable,’ expressing the challenges inherent in building cities that ‘create jobs and prosperity without straining land and resources’ (UN, 2019). Meanwhile, the World Cities Report contends that ‘the current urbanization model is unsustainable in many respects,’ arguing that processes of urbanisation must shift to address issues such as ‘inequality, climate change, informality, insecurity, and the unsustainable forms of urban expansion’ (WCR, 2016:iv). In response, the New Urban Agenda presents an ‘action blueprint’ to build cities that address these underlying anxieties of urbanisation. These concerns are increasingly expanding to recognise the role of sand in urbanisation and the environmental consequences of its planetary extraction. Indeed, this alarm remains central in the UNEP’s (2019) recent publication, ‘Sand and sustainability: Finding new solutions for environmental governance of global sand resources,’ pointing to river, delta and coastal erosion, damage to river, beach and marine ecosystems, as well

as safety concerns for those working in and living around sand extraction zones. Thus, the extraction of sand remains a fundamental dimension within the question of securing sustainable urban futures.



Image 63 – Sandpit without reclamation.

In Accra, the media often reported on these concerns, exposing the threats posed to water bodies, particularly in the Northern region where sand is extracted from river beds. The environmental damage of sand extraction was an issue that re-emerged throughout my fieldwork and one detailed in existing studies of sand winning across Ghana (Peprah, 2013; Salifu, 2016). In an interview with the Head of Mining at the Environmental Protection Agency – the government body tasked with implementing the National Environment Policy – alarm was expressed at the widespread loss of vegetation and biodiversity as well as the disruption of ecosystems more broadly. As he shared these concerns surrounding sand extraction, I recalled a moment at the sandpits where *Piam*’s employees had presented a dead cobra to me. With the snake’s lifeless body hung over a stick, they explained that the bulldozing machine had killed the cobra, which had buried itself in the sand – likely seeking a cool resting place. It was a stark reminder that the sandpits not only displaced people, but violently carved out a presence in the multi-species worlds of Greater Accra. Pointing to a folder on his desk labelled EIA, or Environmental Impact Assessment, I asked what could be done to better regulate the environmental consequences of sand extraction. The Head of Mining at the EPA explained that while the damage from sand extraction could be severe, no EIA would be completed. This, he continued, was a product of the small parcels of land from which sand is extracted, rendering it unsuitable for this kind of scaled-up impact assessment. ‘Sand winning is meant to be small,’ he said. ‘There is

plenty of it, but it's just not in one specific area. Some sites are just two hectares. We wouldn't permit huge land without an EIA, but most land for sand is small scale, because they look for good sand for construction.' Thus, the mobility of the shifting sandpit rendered it unsuitable to the kind of environmental analyses that the EPA was considered more conducive to, essentially limiting the ability to track, monitor and regulate the damage wrought by sand mining. Some of the most severe environmental destruction, however, is unleashed by illegal sand winning, an issue to which I return later.

These ecological anxieties fit within the discourse of the environmental damage wrought by the extractive industries more broadly – a literature which is in no short supply. Indeed, a vast set of analyses expose the immediate and long-term ecological consequences of extraction, pointing to the depletion of habitats, biodiversity loss, air and water pollution and ongoing toxic threats. While each set of environmental concerns remains embedded in place and specific to the qualities of the resource, at a global scale, there is little debate that the extraction of minerals, metals and oil from the earth comes at a huge social and environmental cost. Ghana's recent production of commercial oil off the coast of Western Ghana has prompted growing concerns surrounding its environmental impacts, particularly in the context of the non-compliance of oil firms and limited capacity of state agencies to regulate company behaviour.⁵³ Despite Ghana's 'zero flaring' policy, oil companies continue to flare offshore, releasing a host of toxic chemicals that threaten local communities and the environment. In the short time in which the Jubilee field has been in operation, at least three known oil spills have occurred, often with limited responsibility taken by the companies.⁵⁴ This is set in the context of a much longer history of both large scale and artisanal gold mining, which has generated air, noise and water pollution and the widespread depletion of agricultural lands and resources (Emmanuel et al, 2018). The extraction of sand in Ghana fits with these reports of environmental damage – yet also differs in its scale and mobility – presenting different kinds of regulation challenges to those of other extractive practices. This, I was told, would require the generation of new kinds of knowledge, new monitoring technologies and innovative governing practices. The environmental anxieties emanating from the extraction of sand in Accra were felt particularly acutely in the region's peri-urban peripheries, where sand was physically extracted from the land. Here, this extraction process often turned farmland into sandpit and in the process, displaced existing inhabitants of that land. The widespread loss of agricultural land in Greater Accra and the socio-political consequences of these transformations are issues to which I now turn.

⁵³ 'West Africa oil boom overlooks tattered environmental safety net' (publicintegrity.org, 2012)

⁵⁴ 'Tullow Oil's Foul Play in Ghana' (globalpolicy.org, 2012).

SUBTERRANEAN VALUES

From the edges of the sandpit, there were constant reminders that the extraction of sand was but a moment in the longer trajectory of the land and as was regularly prophesized, the city would soon replace the sandpit. As we watched the bulldozer churn the land into rolls of sandy terrain, the edges of the sandpit were occupied by a small group of people who collected cassava uprooted from the topsoil which had once surfaced the land. Mr Osei explained that the plot had been farmed for cassava by individuals who rented the land from the owner. Though *Piam* paid the owner the 'land fee,' which was determined by the amount of sand mined, they also had to compensate those farming the land for their crops. This value was negotiated at each plot and significantly varied across sites. The land upon which we stood on that first day belonged to a Ghanaian real estate company, its previous owner likely a family. The land had been sold to the estate company who would proceed to flatten the land, organise it into plots, deliver the infrastructure for basic services, like electricity and water, and sell the plots for residential development. He explained that *Piam* and the estate company had, over time, fostered a specific relationship, whereby land was exclusively offered to *Piam* to mine for sand, if it was found to be present. As sand was unearthed and loaded onto the trucks that patiently stood in line, those collecting cassava turned their attention to the crops which had not yet been uprooted, pulling cassava roots from the earth before the topsoil would be removed, the earth bulldozed and the sand excavated. The landscape exposed a struggle over nature, where layers of the earth offered historically-specific sets of value. While growing demand generated new value in sandy subterranean space, the expanding city translated into escalating surface level land values for real estate. In between, the value of the layer of earth that provided immediate sustenance or commercial gain for families or individuals dependent upon farming the land, was eclipsed. In this new equation of value, sand and city seemed to reign supreme.

In order to gain access to grains of commercially valuable sand, the top soil – the first layers of organic material – must first be removed. This is performed by earth moving machines, which scrape the earth's surface materials and shift it to the edges of the pit, leaving in its absence a layer of sand beneath. It is legally required to reclaim the land following the extraction. This involves returning the topsoil from the edges of the pit to the land, evening out the new post-extraction topography. However, illegal sand winners did not practice this policy and only a selected number of those operating with licenses and permits reclaimed the land, often leaving behind a blighted landscape with holes that periodically filled with pools of water, hosting breeding grounds for mosquitoes (Tagoe, 2005). Meanwhile, the removal of the topsoil took with it important nutrients sustaining crop growth, including, for example, magnesium, which is paramount for cassava. Thus, the return of the top soil, rich in nutrients, is integral for farmland to return to use. Yet, doubts were also expressed

at the ability of the soils to return to full capacity even following the return of topsoil. Conversations with pineapple farmers and their manager nearby to open pits expressed strong sentiments that land would not return to full capacity following the removal and return of the topsoil. Meanwhile, an official at Amasaman's branch of the Environmental Protection Agency (EPA) claimed, 'if you put the top soil back on, you will get something, but it won't be much. You need air space for the plants, but the machines compact it when they put it back on.' Those in the area with farming knowledge also expressed doubt as to the fertility of land, explaining that the loss of trees and broader ecosystem change in the area was shifting local climates for crop growth. Beyond these debates, the broad consensus however, was that the ability to grow crops on reclaimed pits would depend upon the initial quality of the soil, the technical competence of the operator, the type of crop being grown, the time of year and rainfall patterns. Either way, what remained clear was that sand mining disrupted the rhythms of crop growth established on the land. In this respect, concerns amounted surrounding the kinds of conceivable futures possible in areas once mined.



Image 64 - Fertilising pineapples.

Of great concern was the uneven unfolding of sandpit and city. While it had been prophesized that the sandpit would soon be replaced by the city, the reality was, that in many instances, the shifting sandpit outpaced the expanding city, leaving ever expanding gaps between the city and the sandpit. In between, lay former sandpits, skeleton plots and villages. Here, in the absence of the city, a significant number people relied upon agriculture and thus access to farmland was important. A member of the Minerals Commission observed that in some areas, 'within 2 or 3 years of mining sand, the whole area will be occupied with buildings. But far away, the development rate is slow. What should they eat while they wait for development?' Meanwhile, once the city had arrived, there were concerns as to the kind of work that those formerly employed in agriculture could perform. Indeed, in further discussions, the Chief Executive at GSMA added that the city doesn't necessarily

share its wealth as it moves, concluding that, '[j]ust because the city is coming, it doesn't bring money to pockets.'

The loss of farmland to both sand winning and residential development in Greater Accra was a concern widely prevalent throughout my fieldwork and expressed in existing literature on sand winning in Ghana more broadly (Peprah, 2013; Jonah et al, 2015; Salifu, 2016). Set within the government's current campaign, 'Planting for Food and Jobs (PFJ)'⁵⁵ the media was active in reporting the loss of farmland to sand winners and estate developers, exposing widespread concern for both the livelihoods of farmers and access to food more broadly.⁵⁶ In particular, a large commercial pineapple farm, Golden Exotics, gained considerable media attention, following its complaints about sand winners in the municipality. We regularly drove passed its sign on our way to operating sandpits, close to the village of Obuom. Marked in red letters, its sign read, 'FARMLANDS LEASED TO GOLDEN EXOTICS LTD, A FREE ZONES REGISTERED COMPANY, KEEP OFF.' Founded in 2003 as a subsidiary of French fresh fruit producing company, Compagnie Futier, it is one of many products of the *Free Zones Act 1995*⁵⁷ and is now one of Ghana's largest pineapple and banana producing and exporting firms. In January 2017, it was reported that Golden Exotics lamented the encroachment of their farmlands by the joint forces of sand winners and estate developers, reducing their output and prompting a series of staff lay-offs.⁵⁸ Management blamed KAS Estates, a Ghanaian estate developer, for encroaching on fallow lands, as well as sand winners who reportedly destroyed the top soil and left open sandpits.⁵⁹ This was set in a context of contestation over the ownership and leasing of land. Indeed, as the media reported, allegedly, a family member of the original owners of the land claimed to be engaged solely with Golden Exotics and no other interested party. She denied that any land had been leased to KAS Estates to construct houses. The Chief of Obuom (a nearby Stool land), also denied leasing land to KAS Estates, prompting a response from KAS Estates' lawyer that Golden Exotics itself did not possess any title to the land, arguing that the land is held by pockets of families and not Stool land. The lawyer also denied all allegations of KAS Estates encroaching on farmland. A year later, Golden Exotics re-emerged in the news, detailing the role that violence played in capturing lands for sand winning and estate development, claiming that groups of men, labelled 'land guards' – or groups of mostly men who are employed to protect or obtain land – had encroached the land armed with machetes.⁶⁰ Together, these claims surrounding Golden Exotics

⁵⁵ 'Planting for Food and Jobs (PFJ)' (Ministry of Food and Agriculture, 2019).

⁵⁶ 'Sand winning activities are destroying our farmlands' (GhanaWeb, 2017);

'Tensions boil as developers take over farmland in Ghana' (Africanindy, 2017).

⁵⁷ This specified that a Free Zones Registered Company was subject to a series of incentives, including an exemption on duties and levies and an exemption from taxation on profits, under the condition that at least 70% of the annual production of goods and services are exported.

⁵⁸ 'Golden Exotics to halt production in Ghana if...' (myjoyonline, 2017)

'Estate Developers Seize Golden Exotics Farmlands' (dailyguidenetwork, 2017)

⁵⁹ 'Golden Exotics goes to court over Obom land dispute' (citifmonline, 2017)

⁶⁰ 'Golden Exotics Fights Land Guards' (citifmonline, 2018)

exposed the complications and interconnections between family and/or Stool land, agriculture, estate development and sand winning. It highlighted that these politics were not contained to local arenas, but influenced the contested re-production of neoliberal spaces that fed into the global food economy.

While certainly not immune to contestations over land and to the potential encroachments of sand winners, a large company like Golden Exotics would likely occupy a far stronger position to pursue justice in their favour – and were likely responsible for the transfer of large tracts of arable land from small scale farmers (MOFA, 2019).⁶¹ The reality is, that those most vulnerable to loss of farmland are small-scale farmers who depend upon the land for both subsistence and commercial gain and whose tenure remains insecure (ibid, Anaglo, 2011). In peri-urban Accra, land is rented or share-cropped to both migrants and members of land-owning families for the purposes of farming. Given that a significant portion of land in peri-urban Accra is family-owned land, the land here is, largely speaking, administered by family heads. As land values rise at the city's creeping edges, zones of farmland are increasingly being detached from customary systems of tenure and shifted to regimes of de-facto privatisation, in which family heads are selling residential leases. As one peri-urban resident put it, 'their eyes have opened.' The effect has been the transformation of vast tracts of agricultural lands in Greater Accra into residential plots, largely for 'strangers.' While technically, both migrant and indigenous farmers could buy these leases, their value is often beyond their affordability, with Oduro and Adamtey finding that the value of the customary 'drink money' demanded represented the land's market value (2017:92). In this light, Oduro and Adamtey point to the growing vulnerability of farm households in peri-urban Accra, arguing that 'increased demand for land for non-agricultural purposes has now made it increasingly difficult for farmers – including those who belong to land-

Image 65 – A husband and wife show me their farmland as it was mined for sand.

owning families – to gain access to land under these customary arrangements' (ibid, 92). The result has been the continued displacement of farming groups to the peripheries of the region, where land may be available under usufruct rights for members of land owning families or at a lower rental cost for both members of families and migrants.

The image has been redacted for copyright reasons.

⁶¹ 'Ga South Municipal' (mofa.gov.gh, 2019).

In many ways, these struggles over land reflect a broader history of Accra's urbanisation as one marked by 'the contradiction between collective and individual alienation of land' (Quayson, 2014:96). Indeed, Quayson observes that,

'in the late colonial period and amid Accra's steadily urbanizing vista, the distinctions that were customarily drawn between non-alienable collectively owned lands and the domain of private property had become blurred by the pressures placed on land conversion from agrarian to urban uses' (ibid, 97).

He further explains that while,

'in rural agrarian usages, there is no question of the outright alienation of land since the land is the object of cultivation of family groups for long periods...urban land usage is grounded on an essential sedentary logic, in which the person or community on the land seeks to establish a sense of permanence rooted in space' (ibid, 96-97).

Here, he argues that 'it is the spatial fixing of buildings that translates the immediacy of private ownership, whether in fact the building and the land on which it is sited is owned by an individual or collective' (ibid). As contemporary Accra expands into the wider reaches of the region, similar struggles between agrarian and urban land uses continue to take shape at its shifting edges.

Today, the transformation of agricultural land into residential plots is often first interposed by the extraction of sand. As Mr Frimpong in Ashalaja explained to me, 'sand winning is a normal thing that happens before a place is developed.' As I outlined earlier, *Piam* developed a close relationship with a Ghanaian estate developer in the region, who called upon them to prospect land and extract sand if it was to be found, before proceeding to flatten the land for future residential development. Thus, at the edges of Accra, enticed by the lucrative gains of potential land use beyond agricultural leases, traditional authorities and family heads are leasing land to sand winners on a short-term basis and then to developers on a longer-term basis (Oduro and Adamtey, 2017). In this way, sand winning can be understood as part of the unfolding of a de-facto privatised land regime in the Greater Accra region. Indeed, unearthing sand at the city's edges remains part of the broader practice of 'flattening' diverse tenure forms and the weaving of agrarian land systems into the unfolding city (Ghertner, 2015: 554). Thus, while sand mining itself is a 'form of landscape modification' (Bridge, 2004:209), it remains embedded in a regime of landscape change marked by a transition from agrarian to urban land uses more broadly. These competing landscapes are inscribed with 'different (and often conflicting) social relations, communal histories, individual memories' (D'Angelo and Pijpers, 2018:216) that vie for dominance at the city stretches outwards. In the shifting shadows of Accra,

this process of landscape modification gives rise to a dynamic marked by the displacement of farmers and the unmaking of farmland.



Image 66 – Entrance of a sandpit.

Concerns regarding the widespread loss of farmland were significant in discussions with the EPA's Head of Mining, pointing specifically to a reduction in cassava production. In both Accra and Ghana more broadly, Cassava is a significant crop. More than 70% of farmers depend on cassava farming and processing as part of their livelihoods, accounting for 22% of the nation's agricultural GDP (FAO, 2013). Its popularity stems from its ability to perform on marginal soils with erratic rainfall conditions and both degraded and sloping lands. Thus, it is often grown by low-income farmers who work the most marginal lands, offering some stability to even the poorest groups (Nweke, 2004; Anaglo 2017). Sandy soils suffer from low nutrient retention and water stress, suggesting that land where sand mining is present, so too are most of the marginal lands. In Ga South, the average land size per farmer is small, at between 0.1-1 hectares (MFAO, 2019) and many of these small farms grow cassava. Thus, to regularly see cassava pulled from the earth to make way for the shifting sandpit may be read as jeopardising the food and income security of some of the poorest agricultural groups in Greater Accra.

More broadly, cassava is crop integral to the life of the nation. As the most consumed crop in Ghana (FAOSTAT, 2007 in Agelucci, 2013), its sustained production is important in ensuring wider food security. As a starchy root, it forms the main source of carbohydrates to meet the needs of low income consumers, providing on average, 599 calories per person per day – and consumption per capita is rising (ibid). Its cooked fresh roots are pounded to form the popular *fufu*, while its flour is used in a myriad of other staple foods. Indeed, roasted as *gari*, fermented as pastes, remade as

starches and transformed into bio-ethanol, cassava is a malleable product (ibid). The Head of Mining at the EPA expressed concern at this reduction of cassava production and in turn projected continued price hikes, concluding that '[w]e can't stop development, but we do need sustainability. We need food security.'

The issue of securing access to food in Accra re-emerged in conversations with the EPA official at the Amasaman branch in Greater Accra. Gesturing towards the window, he explained, 'this area used to have a lot of farming...tomatoes, okra and more. But now, because of development, you have to take food from the hinterland and that increases the costs because of transport and also reduces the quality.' Regular access to nutritious, high quality food in Accra is marked by deep inequalities, with research estimating that on average, families spend 54% of their income on food (Maxwell et al., 2000 in Codjoe et al, 2016), suggesting the likelihood of a significantly higher figure for some of the poorer groups in the city. For Cynthia and Sadiq, access to quality food was erratic. A considerable proportion of their income was spent on food, evidenced by the fact that limited sales of their goods almost immediately translated into reduced food intake in the proceeding days. When incomes were limited, they knew which food stalls to frequent, complaining that the cheaper soups were 'watery' and they were more likely at risk from falling sick. Thus, alongside desires to own their own homes, free from the burdens of rent, both Cynthia and Sadiq sought to own a small plot of land adjacent to their self-built home, where they could grow their own food, and sustain their daily lives in ways less reliant on escalating food prices in the markets. In this way, for the provision of both housing and food, land emerged as a central solution to their daily struggles. In many ways, their desires hint at an underlying contradiction apparent in the expanding city. Driven by rent hikes, individuals like Sadiq and Cynthia buy land far from the city centre, where land is cheaper. Through doing so, they contribute to the transformation of farmland to residential land and subsequent issues of food security, to which they and others remain vulnerable to. This is just one of many complications and complex contradictions which animate the anxious landscapes of the city.

The image has been redacted for copyright reasons.

Image 67 - A woman returns to her farmland following the extraction of sand.

The concerns outlined above are reflected in a growing recognition of the significance of food security in sub-Saharan African cities more broadly, where Battersby (2013) cites the African Food

Security Urban Network as one such expression.⁶² I suggest that the extraction of sand to build the city presents its own challenges to food security across the region, at times magnifying existing vulnerabilities experienced by rural farm households and many of the region's urban inhabitants. Here, while the sale of land for residential development presented the ultimate displacement of farm households, the extraction of sand presented a premature erasure of some of the region's most marginal inhabitants, exacerbating already existing food insecurities and presenting growing challenges to the social reproduction of the city. In this way, the extraction of sand takes place in the context of uneven power dynamics of an unfolding urban vista more broadly, the process of which both re-produces and re-works existing vulnerabilities. This complex set of anxieties surrounding the environment, agricultural resources and food security unravelled in a context of growing alarm at the rate of illegal sand winning, which was seen to exacerbate the scale and severity of the issues of both farmland loss and environmental degradation.



Image 68 - Fields adjacent to the sandpit.

⁶² By food security, I refer to a set of fundamental components, including 'food access (affordability, allocation, and preference), food availability (production, distribution, and exchange), and food utilization (nutritional value, social value and food safety), and...food stability' (Codjoe et al, 2016:204).

Sat beneath a tree at the edges of small road that veered off from a nearby junction, myself and Felix – young *Piam* employee – looked out to the sandpit on the opposite side of the road. We had moved from a nearby pit because the machines were sinking into the soft clay land and had now shifted to a sandpit *Piam* had part-mined in the months previously. With a notebook in his hand, which listed truck registrations and payments for each sale, Felix began counting the entries for the day. Hearing the sound of the trees move in the light breeze, I soon became aware that the usual hectic rumbles of engines and echoing calls were absent. Indeed, business was quiet. I turned to Felix and asked why so. He quickly responded, explaining that they had been illegal sand winning in the area – or ‘sand *galamsey*’. He estimated that at least 100 trucks of business had been lost for *Piam*, noting that while they sell the sand at 200 cedis, *galamsey* operators sell it for 170 cedis. He explained that this price differential was enough to entice tippers, adding that, ‘if someone’s boss says go and get the sand and gives them 200 cedis, they will go to the *galamsey* site and pocket the 30 cedis for themselves.’

As outlined in chapter four, the extraction of sand and gravels is governed by the 1992 Constitution and the *Minerals and Mining Act 2006*, which classifies sand as an industrial mineral, subjecting it to a specific set of governing rules. The law requires that sand mining operators acquire a restricted license granted by the Minerals Commission. In a long description, a member of staff at the Commission detailed the lengthy process of acquiring licenses and permits to extract sand, including the production of a site plan by a licensed surveyor, site inspections and publishing the site particulars in local papers. Within this remit, illegal sand mining is defined by individuals or groups operating without a license. Illegal sand winners may trespass onto land, fail to compensate owners or land users and often do not reclaim the land. As was relayed to me at the Minerals Commission, illegal operators work in the night and may employ land guards to protect the land. Yet, most traceable of traits of illegal sand winning is the visible lack of reclamation. A Task Force⁶³ employee explained, ‘if you want to trace illegal sand winning, you look for places that haven’t been reclaimed. And there’s usually sand left. In fact, about 60% of the sand is left, because they did in the night, in a hurry. It’s a hit and run job.’ Adding that around 30-35% of sand mined in the region is illegal, he explained that most illegal sand mining is carried out by young men. ‘We are suffering unemployment,’ he continued. ‘Young men want money in their pockets and there is a lot of unemployment in peri-urban areas’, a sentiment echoed in conversations with various governing bodies in the region. He compared the kind of ‘instant’ money that could be made from sand winning

⁶³ The Task Force at the Minerals Commission were responsible for collecting information, patrolling sand mining areas, educating individuals on how to mine legitimately and providing a link between sand mining activities on the ground and the central government.

versus that which could be earned through farming the land, arguing that in some cases, the landowner is absent and family members farming the land choose to sell the sand instead: 'You can make 19,000 Ghana cedis fast, without knowing the consequences.' Conversations at GSMA elicited significant parallels in providing explanations for illegal sand winning. The Chief Executive also pointed to shifting technological practices which have increased the scale and pace at which sand is illegally unearthed. In the past, he explained, sand mining was performed through hand labour, with the use of shovels, while the trucks sand was loaded onto were relatively small. However, now, new earth moving equipment technologies are more accessible, facilitating the unearthing of vast volumes of sand. Meanwhile, Chinese branded 25 cubic metre trucks are increasingly imported and much cheaper than the tipper trucks historically imported from the US and Germany. Dating these shifts from the 2000s onwards, he concluded that 'globalisation has implications on everything.'

Expanding this discussion at the sandpits, I asked Felix and others why illegal sand winning was rife in these areas. For them, they too expressed the challenges of securing work in peri-urban Accra, noting that university and senior high school graduates in need of work may turn to illegal sand winning to 'get a little money.' Moreover, from an operators' perspective, sand miners often stressed the difficulty of obtaining permits, lamenting the lengthy and costly process involved. This both deterred and prevented individuals from operating legally. This was a concern which other governing agencies recognised and an issue which received increasing attention in media discussions of illegal sand mining. Moreover, the anxious desires to build across the city meant that there was always a market for sand, whether illegally sourced or not. This encouraged both land owners and tippers to take the risk, knowing that the sand would soon be out of their hands. The legitimacy of sand was also hard to track. Once the grains reached a block factory or construction site, how could you distinguish between legal or illegal sand?



Image 69 - A sand galamsey site.

Yet, I would also learn that the line between legal and illegal sand mining was not clear cut and many companies operated somewhere on this boundary. In an extended interview with the Head of Mining, he explained that while the Minerals Commission issued an operating license more broadly, permits were site specific. Following the issuing of a license, the company is issued with a set of waybills, which it hands over to customers at the point of sale. For tipper drivers, this piece of paper indicates that the sand they are transporting in their trucks has been legitimately sourced. However, the Head of Mining explained that when questioned, operators ‘will flag the permit, but if you look closely, you’ll see it’s for a different site. Mostly they just show the waybill. Until I go and check the site with the GPS and I know it’s a wrong site.’ With these practices in mind, he concluded that ‘there’s a thin line between illegal and legal sand winning.’

Despite these complications on the ground and the difficulty of governing such discrepancies, in media reportage, illegal sand mining gained considerable traction as a ‘menace’ to be eradicated. Often compared with gold *galamsey* or termed sand *galamsey* itself, the media expressed concern at the nationwide degradation of farmland, loss of crops without compensation, pollution of water bodies and the violent means through which some illegal sand winners acquire land.⁶⁴ In 2014, Ghana News Agency reported on an MP’s parliamentary plea for the government to take action,

⁶⁴ ‘Sandy Gold: The bloody race to win sand in Ghana’ (myjoyonline.com, 2017).

‘Illegal sand winners destroy farmlands in Gomaa East’ (businessghana.com, 2017).

‘Residents of Yaakoko demonstrate against illegal sand winners’ (ghanaweb.com, 2017).

‘Sand winning is as dangerous as galamsey – GWLC’ (ghanaweb.com, 2017).

appealing that '[a]lmost every corner of this country has some negative story to tell about sand winning in recent times. Forests have been pulled down, coastal soils massively scooped and savannah areas degraded through sand winning.'⁶⁵ These concerns echoed those in interviews with officials at the EPA, the Minerals Commission and the local government, who together expressed concern at the loss of farmland and vegetation, ecosystem disturbances, and threats of violence. An official at the EPA detailed recent events related to illegal sand winning, explaining that '[s]omeone recently complained that an acre of their farm had been cleared in the night for sand winning...they are armed and sometimes aided by land guards.'

I later joined him on an outing into the region, where, from the moving vehicle, he would point to structures and spaces and recall incidences of both the use of land guards and illegal sand winning. Moving through and beyond peri-urban Danchira and Ashalaja, we passed tipper trucks, machines and small groups of men stood adjacent to piles of sand. He looked out the window and expressed doubts as to whether this sand had been legitimately sourced or indeed unearthed illegally in the night. He suggested the latter was more likely to be the case. We continued moving through the municipality, passing onto a small dirt road among a shallow forested area. Looking out to the surrounding area, we saw dozens of craters filled with rain water. 'This is illegal. They have dug [for sand] and left it open. They didn't do any reclaiming.' We dipped and dived around these depressions and entered onto government reservation land, protected as an important water resource for the city. Despite this designation, however, the security liaison pointed to places where sand had been unearthed, lamenting, 'look what they have done in the night.'

Leaving this space, we headed back towards Ashalaja. Entering the premises of a residential plot, he pointed to an exposed wall, adjacent to which was a deep pit, which he explained had been dug out for its sandy fortunes. 'The pit left the project hanging', he said. 'The owner of the house had come to us complaining that he woke up in the night to the sound of machines. Someone was digging sand right outside the house. He said that they told him that if he didn't cooperate, then they would kill him.' As we drove back towards Ga South Municipality's government building, I made a note of the multitude of spaces from which illegal sand was extracted. As I looked at the piles of blocks on the side of roads waiting to be sold to consumers anxious to secure their own plots, I wondered how you might distinguish which blocks were legal and which blocks were less than legal. Were these blocks made from the earth of protected lands, from forested areas, or from someone's residential plot? Asking these questions pointed to the difficulty of tracking which kinds of grains ended up where, in turn exposing the complex unknowability of the city's material form.

⁶⁵ 'MP worried over illegal sand winning' (ghananewsagency.com, 2014).

Following the MP's plea, the Speaker of Parliament set up a committee to investigate the activities of sand winning across the nation (ghanaweb.com, 2017).⁶⁶ The committee sought to 'examine the adequacy of the existing legal framework regulating sand winning in the country, assess the capacity and effectiveness of the existing institutions responsible for regulating sand winning in the country, assess the impact of sand winning in the country and make recommendations to the House on the way forward' (ibid). Like sentiments expressed in both the media and interviews, the report detailed the consequences of illegal sand winning and the lack of coordination among regulatory institutions, including the Minerals Commission, EPA, local governments, security agencies, the Water Resources Commission and traditional authority. Concluding that 85% of sand winning activities are illegal, the report recommended a more 'decentralised system of license acquisition for sand winning, establishment of a taskforce consisting of Security Officers, representatives from the District Assemblies, EPA, Minerals Commission and where necessary Water Resources Commission at District Levels' (ibid).

I discussed these attempts to govern the illegal extraction of sand with members of the Task Force at the Minerals Commission. In the past, the Task Force had prepared workshops for sand winners, inviting elders, security agencies, and other regulatory bodies, like the Forestry Commission, where they sought to educate these groups on best practices of unearthing sand. The Task Force shared stories of having been attacked out on duty, attempting to make arrests alongside the police. 'I have been attacked on about five occasions,' one member said. 'I was with four policemen, but they are well armed and they are more than you.' They suggested that the areas close to Amasaman, including Ashalaja, have been home to high concentrations of land guards. This coupled with a vast road network has presented serious challenges in governing illegal sand winning in this region of Greater Accra. Reiterating the difficulty of managing a vast region, one member suggested that the future of governing these spaces would be linked to the use of drones, monitoring space vertically. Thus, sand mining presented unique kinds of governing challenges. Moving regularly across a vast network of lands governed through traditional authority structures and taking place under the cover of nightfall at the region's urban edges, the illegal unearthing of sand exposed the state's political and spatial limits. Ground patrols were an important governing strategy and these were operated through local government agencies. This strategy was closely linked with the government's attempts to control the use of land guards, which was argued to present a security threat to the nation.

Indeed, illegal sand winning was often couched in terms of security. As the Ga South security liaison explained, 'Just the other day we made an arrest of 75. They are carrying weapons and they are not

⁶⁶ '85% of sand winning activities illegal – Parliamentary report' (ghanaweb.com, 2017).

afraid to use them. They present a security threat to these areas, because of the safety of the roads and [the fact] they are armed. So we are working with the military.’ Indeed, at each of my visits, the frontage of Ga South’s building was busy with movements of military personnel and vehicles, reflecting the central government’s directive for local governments to work with the military to secure regions threatened by both land guards and illegal sand winning. This policy of deploying the military was not isolated to Greater Accra. Across the nation, the military has been enlisted to better govern the illegal extraction of sand, reflecting a longer history of military support to manage extractive industries more broadly – particularly protecting concession land from artisanal miners. In March 2018, a news story broke across the nation, reporting that military personnel had set fire to 14 tipper trucks and machines used for sand winning at the Dalun River – a tributary of the White Volta in the Northern Region (ghanaweb.com, 2018).⁶⁷ Allegedly, the military’s decisions to torch vehicles and equipment followed the repeated warnings to operators illegally extracting sand from the Dalun River, which forms the major source of water supply for the region. According to Joy News, the MP for the area told them that ‘the military cannot use illegal means to solve what they deemed to be an illegal conduct. He would rather the suspects are arrested and prosecuted but not to have their equipment burnt’ (ibid). Attracting ongoing media attention, the story demonstrated the growing anxieties surrounding sand winning and an attempt to govern yet another extraction process through military means.

The use of the military to secure regions was articulated to me by a member of the Bureau of National Investigation (BNI) –the body responsible for collecting intelligence on issues considered paramount to the internal security of the nation, including organised and financial crime, sabotage, espionage, hijacking, terrorism, piracy and drug trafficking. In the context of illegal sand winning, the BNI was responsible for gathering information and generating policy for the National Security Council to implement, including the deployment of the military where needed. The BNI official explained that ‘police have become common to people, but when the military comes in, it has force. It is well armed.’ The military, working alongside both the state intelligence and the local government, regularly moved through the region, making arrests and impounding pay loaders and earth moving machines. The location of these illicit activities at the edges of the municipality seemed to highlight the limits of the state’s capacity to govern its territory and the local state was anxious to shore up its power throughout these peri-urban zones – attempting to catch up with these shifting spaces of the city. The grounded presence of the military was thus an important dimension in securing the edges of the metropolitan region and signified an attempt by the local state to bring these zones into the realms of ‘governable’ urban space (Watts, 2004).

⁶⁷ ‘Mubarak angry with Military over torching of sand winning equipment’ (ghanaweb.com, 2018).



Image 70 - Looking out onto an illegal sand winning site.

For the BNI official, significant improvements in the security of the region had been made and for the Chief Executive, the growing number of businesses in the municipality was a product of this security. Following a meeting at the newly constructed West Hills Mall in the southern, most densely populated part of the municipality, he looked out across the enterprises in business: fast food outlets and restaurants, international cosmetic brands and commercial banks. Pausing for a moment, he turned to me and said, ‘private and commercial buildings are springing up across the municipality. This mall wasn’t here. But it’s because the place is peaceful and people feel safe to do business.’ These businesses were vital in generating internal revenue for the municipality – a pursuit the local state had been recognised for, having been awarded the title of ‘Best Performing Assembly on Internally Generated Funds Innovation’ (IGF).⁶⁸ In this way, securing a region free from illegal sand winning and the related activities of land guards was paramount to securing economic development in the municipality more broadly.

THE ANXIOUS ANTE-LIVES OF URBAN ELSEWHERE

As both longing and apprehension, I suggest that anxiety captures an important dynamic embedded in the urbanisation of sand in contemporary Accra. Captured through Sadiq’s longing for a different kind of life in the city, Accra presented itself as a place of aspiration and motivation. These desires undergirded the unrelenting hours Sadiq spent at Awoshie Junction, preparing his goods, day in and

⁶⁸ ‘GA South Judges as Best Performing Assembly on IGF Innovation’ (gsma.gov.gh, 2018).

day out, hoping he would make a sale to realise his hopes of owning a plot of land at the edges of Accra, upon which he would build a modest single storey home. The urban future of Sadiq's desires was a necessarily concrete one, and together with many of the city's inhabitants, these anxious moves to secure a concrete home unleashed their own set of sandy anxieties across the city, nation and planet.

I opened the analysis in this chapter with recourse to the anxieties emanating from the use of low quality building blocks, set within a context of suspicion and land insecurity. From here, through the materiality of cement, I turned to the intrinsic connection between block quality and the national currency and with cement in mind, I highlighted the environmental anxieties implicated in urbanisation more broadly. Here, attuned with the ecological devastation wrought by sand extraction across the planet, I highlight first-hand experience and second-hand accounts of sand winning's degradation of habitats and the related pollution of water supply in the Greater Accra Region. Set within these landscapes of sand extraction, I pointed more specifically to the loss of farmland across the region. Located within the uneven power relations of land ownership and access, I positioned the unearthing of sand within a regime of de facto land privatisation and the unfolding of the city more broadly. Reiterating concerns expressed through interviews with officials at the EPA, I discussed the widespread loss of farmland and resultant food insecurities thus engendered.



Image 71 - Road to a sandpit.

With these anxieties in view, I turned to the practices of illegal sand mining, which were seen to exacerbate both environmental degradation and farmland loss throughout the region. Invoking an analysis of the driving forces behind illegal practices, I shifted to the nation state's response and

more specifically, the local state's attempts to draw these peripheries into the realm of governable urban space. Together, shifting across multiple scales, spaces and temporalities, I show that the anxieties emanating from the urbanisation of sand remain locked into a specific set of conditions, marked by environmental risk, international currency regimes, uneven access to land, a particular urban food economy, peri-urban unemployment, existing forms of organised crime and state prerogatives. Thus, I argue that the anxieties generated through the urbanisation of sand cannot be separated from these underlying conditions, a dynamic which exposes the ways in which the redeployment of nature as built form remains intrinsically embedded in situated socio-natural and political contexts.

I suggest that this reading of anxiety offers an important alternative to that those written from the outside, which have, in large part, positioned African cities as anxious loci of crisis and insecurity. In these accounts, African cities are positioned as spaces through which new security threats to the [Western] world may emerge, as future sites of [US] military strategic significance and as zones where the anxieties of an urban twenty-first century are likely to play out at their most extreme. In this chapter, I have sought to depart from these meanings of anxiety, instead exposing what anxiety looks like once grounded in the specificities of the city's sandy material form. I suggest that this is not simply a matter of scale, but rather a difference of perspective, owing its analytical foundations to ethnographic accounts which have attempted to grapple with the myriad forms of anxiety which undergird the making, unmaking and remaking of the city.

To conclude, sand remains a core material in our planetary present. Thus, a broad set of anxieties related to the urbanisation sand are likely to unfold, the contours of which will remain embedded in the specificities of place. In this way, I ask, what might the anxious ante-lives of urban form look like from elsewhere? How can these anxieties be better understood, managed and remade? How can we think through global spaces of anxiety without losing critical attentiveness to particular contexts? And what kinds of futures can we set in motion through a re-imagination of the ante-lives of urban form, in both Accra and elsewhere? These are questions that evoke further thought and likely further rounds of research.

The image has been redacted for copyright reasons.

Image 72 - Neighbours at Awoshie Junction.

CONCLUSION: SHIFTING SANDS IN ACCRA

URBANISING SAND IN ACCRA

In this concluding chapter, I present reflections on the research, consider scope for future directions and bring together the thesis's core contributions. The chapter begins with a discussion of the complicated nature of ethnographic relationships and the emotional labour embedded in this work. These reflections are positioned in the context of reflecting on my positionality in the field more broadly, bringing to the fore issues of race more specifically. This extends to a meditation on the politics of representation, exposing the inevitable work of translation intrinsic to research and the broader ethical issues therein. I argue that the notion of 'vanishing points' (Mouffe, 1993) provides an important way of recognising the unrelenting work of generating postcolonial research.

With these limits in mind, I turn to contours of the research findings and contributions. Here, I review the chapters and their specific contributions, arguing that an analysis of sand's urbanisation in Accra extends our grasp of the city as a specifically geosocial, socio-natural process, meanwhile expanding our view of extractive industries and their material relationships to urban formations. Moreover, I contend that this perspective on the city offers scope for reading landscapes of Accra through otherwise neglected urban economies and labour practices, as well through the realm of anxiety grounded in the re- and un-material making of the city. From here, I present possible future directions for expanding this research, concluding with a reading of 'shifting sands' as an urban condition. Together, the facets of this chapter seek to position the findings of the thesis in relation to their underlying limits, meanwhile, exposing the potential future work rooted in the existing contours of this research.

VANISHING POINTS AND PARTIAL TRUTHS

RELATIONSHIPS

In October 2019, I received a Facebook Messenger call from Cynthia. Her voice sounding more high-pitched than usual, she revealed, 'my sister, I'm pregnant.' In the run up to this phone call, Cynthia had been extremely unwell. This began in May, when Cynthia messaged me to let me know she was in hospital. By this point, she and Sadiq were no longer in a romantic relationship. Following the demolition of her house, she had temporarily moved into his small room, however, the difficulties that had been a consistent feature of their relationship became unbearable, and Cynthia decided to

call things off. She moved to Somanya in the Volta Region, where she would spend some time with her extended family. Months after, she fell ill. Complaining of extreme fatigue and nausea, she went to the local government hospital, where she underwent a series of prolonged and expensive medical tests. Little could be ascertained from her test results. Other than observing her likely experience of anaemia due to low iron levels, the medical practitioners suggested there was little wrong with Cynthia. A few weeks passed and Cynthia was still mostly bed-ridden, unable to consume much food and mentally exhausted from her unresolved illness. She decided to seek medical help from a private institution in Accra. Using the funds she had put aside for rent, she underwent several tests: malaria, HIV, typhoid. They were negative.

Weeks passed, and still unwell, she made an appointment with a herbalist in Somanya. Having spent more money on securing herbal medicine, Cynthia was yet to feel any better. At this point, Cynthia called me and explained her situation. Both angry and confused, she explained that a few members of her family had suggested that her illness was spiritual in nature and that she should seek help from a healer. Frustrated with the failure of any of these options to bring to light the cause of her ongoing nausea and fatigue, she stayed in Somanya and slept to her recovery. After a month or so, Cynthia returned to Accra, visiting her mother and siblings and spending time at a family friend's house, where she would cook and clean for them. Her father in the US sent her some money, which she used to pay for two years of rent up front and she began drafting out new ideas for a business nearby to her future home in Madina, Accra. She considered cooking *Indomie* or selling clothes. Weeks passed and Cynthia was to fall ill again. She went to a hospital in Accra and after a few routine tests, they revealed to Cynthia that she was in fact five months pregnant. Explaining this to me over the phone, she laughed, 'the nurse said that the baby must have been hiding before' – referring to the initial tests she'd had in previous months. Cynthia was both shocked and anxious. She was unclear how she would support the baby, given that the father, she explained, was not making a regular income.

As she shared the news of her pregnancy, a surge of emotion rushed through me. Cynthia had not only made possible the entirety of the research but had become a good friend, who I cared about and who, I felt, cared about me. As the research progressed, I began to feel more responsible for her welfare. This became a particularly difficult space to negotiate. Seeking advice from friends and other researchers, it was clear that there were no simple rules to the ethnographic research. I had been advised to maintain healthy boundaries during ethnographic research, however, our relationship had begun as one of friendship and had extended in ways unanticipated to myself. In this way, given our friendship, it became increasingly difficult to maintain the kinds of boundaries that would be viewed as conducive to conducting ethical research. In times of financial need, I would, if possible, support

Cynthia, over and above the payments for her time as she assisted me during interviews and trips to the sandpits – both of which emerged later in the research. This slow transition from one of reciprocity to responsibility was difficult and I found this space difficult to negotiate. It was emotionally exhausting and contributed in no small part to a sense of anxiety which stayed with me throughout the research – and is yet to surpass. This was compounded by leaving and returning to Accra, which only seemed to magnify my sense of privilege of being able to move in and out of the spaces I engaged with, while those I engaged with experienced a very different and indeed, limited kind of global mobility. Meanwhile, I was also extremely aware that the sense of responsibility that developed throughout the fieldwork mapped all too easily onto the well-known contours of the victim/saviour binary, which bears resemblance to both civilising missions of the colonial era and today's (D)development discourses and apparatuses. In this way, the fieldwork space was fraught with both emotional and political anxieties and at times, these aspects were not easily reconciled.



Figure 5 - Violent evenings, pt.1.

REFLEXIVITY

These brief ruminations only hint at the magnitude of unease that characterised the research – an unease which was founded on the very real inequalities that undergirded the research. They also hint at the politics of positionality that shape the nature of fieldwork and the need for reflexive practice to better understand the way in which the researcher necessarily shapes the research more broadly. By reflexivity, I refer to a 'holistic process that takes place along all stages of the research

process – from the formulation of the research problem and the shifting positionalities of the researcher and participants through to interpretation and writing’ (Hesse-Biber and Piatelli, 2012: 561). Indeed, for the feminist reflexive researcher, reflexivity is to be understood as ‘a self-critical action whereby the researcher finds that the world is mediated by the self – what can be known can only be known through oneself, one’s lived experiences, and one’s biography’ (ibid).

In this respect, Faria and Mollett’s (2016) critical feminist reflexivity is instructive. Through discussions of their own fieldwork, they engage ‘whiteness’ and the ways through which its reproduction in the field shaped their work in the global south. In their analysis, whiteness is not a ‘fixed, biologically determined, phenotype,’ but rather ‘a structural advantage, standpoint, and set of historical and cultural practices’ (ibid, 81). Writing against what they position as ‘an (unmarked) whiteness in geographic knowledge production,’ they bring together postcolonial feminism and intersectional thinking, which together ‘push for a historically and geographically contingent and complex theorization of power in the research encounter’ (ibid) (see also as Faria and Mollett draw upon Mohanty, 1997; McKittrick, 2006; Crenshaw, 1989). They supplement this work with a post-racial analysis, which ‘productively traces the shifting meanings, presentation, effects, and affects of race, and its production through mundane, naturalized, and everyday language and performance’ (ibid) – as well as emotional geography, which exposes the ‘work of feelings in structuring social and spatial life’ (ibid, 82). Together, these positions enable Faria and Mollett to theorise race, and indeed ‘whiteness,’ as ‘historically and geographically contingent, yet also performed, affective, and shifting’ (ibid). Yet, this analysis of whiteness must also be situated in the specific context in which racial identities are given meaning. Indeed,

‘the seemingly knowable object... “white woman,” [or “black woman”] cannot be understood outside of the specific historical and geographical processes that constitute this subjectivity as intelligible, and the symbolic regimes of language that summon this representation to life’ (ibid, 86).

In Pierre’s (2013) analysis of racialisation in urban Ghana, she locates the production of Blackness and Whiteness as two sides of the same coin. Situating the production of race in the ‘*long duree* of European empire making,’ (3) she writes of this production in the following terms: the

‘structure of colonial rule consolidated a racialization process that began with a European presence on the West African coast and continued through the transatlantic slave trade. This racialization was operationalized through the construction of natives and ethnics: indigenous African groups were nativized through juridical and practical ethnogenesis

constructed through the tropes of custom and tradition – on the one side was Black Africanness – on the other was the consolidation of Whiteness’ (ibid, 71).

Through this dynamic, we are thus able to position white power in postcolonial Africa more broadly, as one that ‘stretches back to racialized colonial rule, was carried through to contemporary international economic and political dominance, and is solidified through unofficial racial, cultural, economic and spatial segregation’ (ibid, 71). Thus, Pierre writes that ‘Whiteness’ refers to ‘historical, cultural, and social practices, as well as ideas and codes, which practically and discursively structure the power and privilege of those racialized as White’ (71-72).



Figure 6 - Violent evenings, pt.2

For Pierre, whiteness in today’s Ghana can be understood as a ‘high status linked to global economic positionality’ (ibid, 96). Here, she recalled a group of her friends suggesting that there are simply two types in this category of whiteness:

‘Development Whites’ and ‘Peace Corps Whites.’ (ibid, 72). While the former were likely those employed in grand development institutions, the latter included the ‘many exchange students, recent college graduates on short-term volunteer trips to (mostly) rural areas,

others who are independently taking backpacking trips across West Africa and academic researchers' (81).

This categorisation – hardly set in stone – is useful in positioning myself in Accra and attempting to understand the ways in which people received my presence. As a young woman, often in casual clothes, I was frequently asked if I was a volunteer, or a taxi driver would assume he knew where my hostel was, after me simply naming a landmark - even though I was not, in fact, staying in a hostel but was rather renting a room in a house.

During the first weeks at Awoshie Junction, my exact identity and purpose was certainly hard to pin down. Cynthia often explained that people were asking questions and she replied to them that I was her friend and was coming to do some research: I was a student. The nature of ethnography also rendered my position difficult to locate. What was I hoping to learn? Why was I hanging around all the time, seemingly not doing much? What was my job? How was I funding this life? These were normal questions that individuals asked me, both at Awoshie Junction, on the tipper trucks and at the pits. Thus, beyond my skin colour, the nature of ethnographic research seemed to solidify my perception of privilege and in turn, my going to and from Awoshie Junction – simply to talk and hang around – performed my whiteness.

More broadly, my naming as *obruni*, cast me into the broad group of 'foreigner.' The name *obruni* was initially used to describe all European people in Ghana, but is also used in a myriad of other ways. Indeed, as Pierre notes,

'over time, *obruni* has been used to refer to foreign Whites, foreign Asians, and lighter-skinned and often brown-skinned diaspora Blacks; it has also been applied to Ghanaians returning from abroad who are perceived to be affluent and often derided as dressing, walking, talking, and acting White' (2013:77).

In this way, *obruni* 'signals a thoroughly racialized discourse in Ghana, and it is a discourse about Whiteness and the articulations of White power and privilege' (ibid). On an almost daily basis, someone would call out to me on the street, '*obruni*, how far?' or '*obruni*, ow koh ah3?'⁶⁹ These were constant reminders that I carried around with me a body read as both foreign and privileged. Indeed, following nine months of visiting Awoshie Junction, I became familiar face in what was a small stretch of the urban fabric. Unlike other parts of Accra, Awoshie Junction was fairly void of white visitors. Yet, when an *obruni* occasionally passed by, Cynthia and others would jokingly ask, 'Kate, is that your

⁶⁹ Translated as 'Where are you going?'

sister? Is that your uncle?’ It was a joke that extended throughout my research and one that Cynthia found consistently amusing. This also extended to a Lebanese man who periodically visited the Junction, where, upon his sighting, Cynthia would announce that my father was present. This served to expose the ways in which Whiteness was understood as something less defined completely by skin colour, but more likely by economic privilege, of which the Lebanese community in Ghana were seen to possess (Pierre, 2013).

These everyday performances of whiteness were punctuated by comments which brought race centre stage. Indeed, early on in my research at Awoshie Junction, I was introduced to a man named William. William owned a fried rice and chicken business, located next to the church. During the period of removal threats to those under the wire, I was advised to meet with William, given that his own business was under the wire on the opposite side of the road, and he would likely have some important insights to contribute. Thus, I met with William next to his business, where he set up two chairs and instructed that I ask him questions ‘like a journalist would.’ He had a fierce sense of humour and often pushed the boundaries by making sexualised jokes that made me visibly uncomfortable. During the course of my research, William and I spoke at length about Awoshie Junction, his young son and his life – and he asked in depth questions about my own life and country. He shared his limited experience with white people by referring to a story his friend had told him. The details of the story were limited, however, he explained that this friend had worked on a construction project in Ghana, managed by a white man, who repeatedly made racist remarks. I explained I was sad and angry to hear of these encounters. Francis also shared his experience of racism in Ghana, explaining that his only encounters with white people had been marked by feelings of white superiority and aggression. These moments were utterly saddening, and whiteness seemed to shoot through my body and entire existence.

Later in the year, having become a regular visitor to William’s fried rice spot – as well as a helping hand in his catering business and an amateur entertainer to his young son – he introduced me to a young girl, Abena. Abena was no older than twelve and lived next to William in the quarters of his extended family. One evening, William and I were sat on a couple of chairs outside his home, where, having returned home from school, Abena politely greeted us. Abena looked at me for a moment and then proceeded to talk. She explained that she had been learning about European imperialism, the slave trade and colonialism at school – its horrors, its violence, its audacity. She asked me if I was aware of this history of European violence to which I replied that while I did indeed know to some extent, but there was much for me to learn. She continued to share what she had learned and as I nodded, she turned to me and said, ‘do you think it’s fair that they did that?’ I was speechless for a moment, as I couldn’t begin to imagine how I would articulate the sense of injustice that I wanted to

portray. William also looked at me, awaiting for me to say something meaningful. Held up to me like a mirror, these moments reflected back to me not simply a white body, but colonialism, white supremacy and contemporary privilege.

Whiteness also intersected with my gender and age, particularly while moving with various groups of tippers across Accra. More so than the sandpits, trucks were masculine spaces and my presence was unusual. At first, I became the centre of jokes regarding who I would marry in the truck, however, as time passed, these jokes subsided. In some ways, my position as a young woman also rendered me less threatening and the tipper drivers and those at the sandpits often displayed kind acts of care and responsibility – for example, ensuring I had water, taking me for lunch on our way out to the pits and making travel arrangements for my return from the sandpits to Awoshie. It is unclear whether the same kind of generosity would have been offered to a man and these were questions I was unable to locate answers to. My guess would be no.

The image has been redacted for copyright reasons.

Image 73 - Evenings at Awoshie Junction.

Together, the ways in which my position as a young, white, western woman affected the research is difficult to ascertain. While it certainly shaped the relationships I built with people – how they saw me and what they chose to share with me – it was unclear exactly *how* this may have affected the kind of research that was produced. In some ways, the kind of friendships that existed prior to and extended throughout the research served to produce detailed data of the intimacies of people's lives, yet it also remained unclear how and why people chose to present their lives in the ways that they did. Moreover, in some ways, prolonged ethnographic work allowed me to capture parts of lives which participants may otherwise would not have shared. Yet, in other ways, I was fundamentally limited in what I could know. Some of these limits were founded upon language. Indeed, while over the course of the year I was able to hold very minor conversations with people in *Twɔ*, my ability to understand the language in any kind of depth was extremely limited. I would often ask people around me to translate conversations and this was be frustrating for both myself, but also more likely for those translating. Moreover, while some interlocutors spoke fluent English, many phrases and concepts were not easily translatable, with those kindly performing this work finding it difficult to rephrase idioms, for example. As Jazeel writes, 'the planet is not always written *in English*...it is not always written in a script that is easily legible by and to the (Anglophone) geographical researcher' (2019:8). This observation, of course, extends well beyond the translation of language and rather elucidates that the cultural and ideological realms of others are not always within graspable reach of

researchers – a fundamental limit at the centre of all research endeavours. More broadly, matters of translation remain crucial to debates concerning representation in research, which is an issue to which I now turn.

REPRESENTATION

Questions of representation with which this thesis is concerned owe much to the work of Gayatri Spivak (1994), who in 'Can the Subaltern Speak?' presents a compelling critique of the Subaltern Studies collective, through which she seeks to highlight the always necessary act of *re-presenting* in any moment of representation. In this respect, Spivak draws upon the two meanings of representation in the German language: *darstellen* and *vertreten*. In a reading of subaltern geographies and postcolonial strategy in geography, Jazeel draws on this distinction specifically. Indeed, thinking with Spivak's work, he writes,

'[t]he first sense of 'represent' – *darstellen* – denotes the constitutive work that representation does, as in philosophy or art's capacity to make something present again, but interpretively so.' However, '[t]he second – *vertreten* – denotes instead the substitutive use of the word in a political sense, as in representative democracy, where we might designate a proxy to speak on our behalf' (2014: 94).

As Jazeel contends, Spivak's point is thus that in any moment of representation, both *darstellen* and *vertreten* are present. In this way, my representation of the lives and spaces in and of Accra must be understood as a re-presentation of something presented to me – as a kind of translation. Locating this dynamic forms an important dimension to remaining reflexive throughout the research process and reminds us that the research presented here is not simply a regurgitation of a reality, but rather a co-produced, 'partial truth' (Clifford, 1986). In this vein, throughout the thesis, I have attempted, as far as possible, to present detailed ethnographic material and a positioning of myself within the text. This was driven by an attempt to allow the reader to situate my interpretations in the context of the data presented and potentially draw out alternative readings in the work. Indeed, the inclusion of thick description, stories, speech and photographic images, though not unproblematic, have sought to render visible some of the translations embedded in this specific representation.

Yet questions remain. While much can be done to read whiteness, coloniality and privilege into our work, does this render it postcolonial? Moreover, despite this work of seeking to build a postcolonial ethnography, the inequalities embedded in the production of knowledge expose the limits of these strategies. Indeed, throughout my research, there remained stark reminders that no one had in fact invited me to do research in the spaces I found myself, or indeed in the worlds of others, who had in

fact, kindly allowed me to stay. In this way, the pervasiveness of whiteness extended into the unequal structures of knowledge production, rendered most visible through the privilege of presenting the lives and spaces of Accra's inhabitants. My capacity to represent their lives and city, pitted up against their perceived inability to capture something of my own world, mark the contours of a particularly uneven research relationship. In this way, I continue to ask – with uneasy conclusions – can a white western woman operating within the academic realms of a global north institution really contribute to postcolonial research – urban or otherwise? My view is that much still needs to be done in order for work to be granted such a title – and rather, something akin to Roy's deployment of Mouffe's (1993) 'vanishing point' may be more useful. Here, a vanishing point can be understood as 'something to which we must constantly refer, but that which can never be reached' (Mouffe, 1993:85 in Roy, 2011:235). In this way, I argue that a postcolonial urban ethnography is a vanishing point, something to which we must continually stretch ourselves out towards.

The image has been redacted for copyright reasons.

Image 74 - Perfecting a presence.

ETHICS

In addition to these questions of postcolonial research, a broader ethics of research remain important to consider. Jazeel argues that 'the more important question as more global theoretical repertoires are built is what exactly is theory for, of what use is it, and how can it be mobilized for politico-intellectual ends (2019:12)? Seeking to answer this grand question with specific answers is difficult, however, I hope that the ethnographic work detailed throughout the previous chapters may offer scope in this respect. Thinking more specifically about the nature of the fieldwork, Murphy and Dingwall set out an 'ethics of ethnography,' contending here that 'given the diversity and flexibility of ethnography, and the indeterminacy of potential harm, a prescriptive approach may be positively unhelpful' (2001). The notion of reciprocity was particularly difficult to negotiate ethically. Indeed, periodically, individuals would seek financial support in times of need, or ask for things from the UK. Of course, on a limited student budget, I was often unable to meet these requests, meanwhile these requests presented challenging ethical questions regarding reciprocity and the nature of relationships. Was it appropriate to gift money and items to people at the junction? Did this further

instil my whiteness in ways that manipulated participants? Did these acts generate moments of exploitation of both interlocutors and myself? It was not always clear whether and how my research could cause participants harm, however, at particular moments, I felt extremely aware of this potential. For example, following the threats of removal posed to a number of businesses at Awoshie Junction, upon preparing for a meeting at the local government offices, a community inhabitant suggested it may not be wise if I joined them, given that it would appear as if they could access money and this would complicate matters of financial negotiation that they anticipated.

I was also concerned about revealing the intimacies of individuals' lives, particularly Cynthia and Sadiq, who became important interlocutors. Though I sought consent for my presence, during the process of writing, I have become increasingly anxious about the representation of their lives and the inability to have gained consent in advance for the kind of information that was shared with me. More broadly, obtaining consent was difficult in fieldwork settings where the boundaries of spaces were not easily defined. While I gained consent at Awoshie Junction and at the sandpits through more formal means (traditional authority and *Piam*) and negotiated access to information on the ground at an individual level, obtaining official consent from every individual who contributed to the research remained near impossible. While I remained committed to gaining permission before taking photographs, particularly if they were portraits, again, this remained unofficial and it was unclear how I would have been able to achieve formal consent in these contexts. As Delamont and Atkinson argue, 'anticipatory consent, individualized participation and predetermined research designs are all repugnant to the conventions and practice of ethnographic fieldwork' (2018:130). Thus, reflecting upon these necessary ambiguities embedded in the ethics of fieldwork, I align myself with Haraway when she writes that 'an ethical judgment is not a quantitative calculation at root but an acknowledgement of responsibility for a relationship' (2000:147 in Doucet, 2018:73).

To conclude, these reflections have sought to expose the limits of my research. They provide a reminder that the work presented here should be read as a 'partial truth' (Clifford, 1986) – as the product of my embodied presence in and beyond the field and the relationships with specific individuals I was able to build. I also sought to expose the limits of this work as a postcolonial project, instead opting for postcoloniality as a 'vanishing point' (Mouffe, 1993). Bearing these limits in mind, I turn to the research findings and their specific contributions. This discussion begins at *Build Africa Block Factory*.

The image has been redacted for copyright reasons.

Image 75 - Family.

Despite its name, *Build Africa Block Factory* was a humble enterprise. It sat at the roadside, somewhere beyond the village of Hobor, but not yet past the hill that cast a series of ambiguous shadows across this part of Greater Accra. While sat perching on the edge of the factory's water well, I asked Christian, the young man in charge of the day's block building operation, 'how long has the factory been running?' He replied, 'It's been here around a year. This area is now developing, so that's why it's here', Christian replied, as he gestured outwards to the surrounding areas. Indeed, much like the elder and politician at nearby Ashalaja, Christian pointed to the surrounding shifting landscapes, describing them as 'developing' – changing, moving, urbanising. And in his rendition, block factories were implicated in these shifts. *Build Africa Block Factory* was a place where materials – sand, cement and water – came together to form something bigger than the sum of its inputs. Here, as Christian, Gregory and Ebu laboured in unrelenting harmony to generate a seamless production process, I recalled a not so distant past in which these blocks had once symbolised something of an urban beginning for me. I imagined how they would begin their lives at the moment of consumption, transported to a plot of land and brought into being as a new home, or a new commercial building in the rapidly changing landscapes of the city-region. Whether stacked at the corner of a plot, emerging as a skeleton structure, or transformed into a densely-inhabited building, I had understood these blocks through what they would become. I had known them through their afterlives. Now, after a year of tracing the dis-embedding and distribution of one of their main components, these blocks seemed to symbolise more of an ending, or indeed objects implicated in a much broader process. Learning to see the city through sand had unearthed the complex ante-lives of urban form – lives which seemed to cement space, time and people together in multifaceted relationships.

In chapter one, I argued that despite the centrality of sand to the city's materiality, limited work has engaged with this material. The work that has taken sand and the city together as a point of departure, has done so through the narratives of grand scales of extraction and consumption in twentieth century USA and contemporary China and India, which may fail to reflect the unfolding realities of elsewhere. I contended that looking to urban elsewheres would expose the diversity of dynamics implicated in the transformation of sand into city, while enabling us to draw out the role of historical and socio-natural specificities in shaping the nature of these transformations. Here, I argued that shifting the sand-city narrative elsewhere would contribute to the crafting of 'new geographies of theory' (Roy, 2009:820) and indeed postcolonial geographies more broadly. From here, I introduced Accra, detailing the city's long history from 'Ga Majii' to a 'variegated and contradictory metropolis.' I argued that the significance of writing sand from Accra lies partly in the city's specific history, honouring the importance of reading contemporary urbanisation processes

through place-specific historical trajectories. Meanwhile, I also suggested that Accra's location on a rapidly urbanising continent, marks it as an important place from which to analyse urban processes, generating a critical space of comparison with other cities on the continent and beyond. With postcolonial calls in mind, I suggested that positioning sand as the city's 'constitutive outside' serves well to write against the all-encompassing inevitability of urbanisation, instead asking us to think about the ways and terms through which sand *becomes* the city. This, in turn, allowed me to present the core question undergirding the thesis, followed by a series of supporting sub-questions.



Image 76 - Build Africa.

In chapter two, the thesis turned more specifically to the story of the research itself, charting the shift from salon, to junction to sandpit. The chapter exposed both the chance encounters and methodological decisions which together shaped the progression of the research. Here, I detailed the spaces of Awoshie Junction, the tipper truck and the sandpit, as well as introduced key interlocutors that remained central throughout the research. This chapter also brought to the fore important ethical questions which I have sought to address in this concluding chapter.

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Image 77 - The block building process.

In chapter three, the thesis generated a theoretical discussion through which to situate the urbanisation of sand, terming this dialogue between sand and the city as the *unearthing of a city of sand*. The chapter detailed the historical and contemporary under-provision of housing in Accra, positioning this analysis as important political-economic background for understanding the demand for sand. Pointing to the limited engagement with geological processes in the social sciences, I presented significant facets of Ghana's geosocial dimensions, therein locating the urbanisation of sand as an important opportunity to extend this analysis beyond the prized minerals which have tended to dominate the nation's historical narratives.

With these positions in mind, I engaged with three sets of literature with a view to situating the urbanisation of sand: extractive industries, extractive urbanism and urban political ecology (UPE). I showed that the urbanisation of sand fits uneasily within and across these literatures, exposing the limits and biases inherent in these works. In this way, I argued that an analysis of the urbanisation of sand presents an opportunity to stretch the theoretical dimensions of these existing literatures. Specifically, I contended that moving beyond an analyses which centres the prized minerals of oil and gold serves to elucidate the domestic geographies of extraction and consumption undergirding contemporary urbanisation processes across the world. Moreover, I suggested that detailing the ways in which sand is brought into the urban serves to strengthen our understanding of the relationships between urbanisation and extraction as co-constitutive processes, here exposing the fundamentally geosocial material links that connect natural resources and cities. Additionally, I argued that an analysis pertaining to the urbanisation of sand expands our understanding of the city as a socio-natural process, through the prism of an integral, yet thus far, theoretically marginal material. I argued that such an analysis would serve to deepen our engagement with the fundamental links between nature and the built environment, while responding to calls to provincialise UPE in important ways. In this way, I maintained that in addition to shifting the co-ordinates of our theoretical engagement with sand and cities beyond the US, China and India, and building contemporary geosocial analyses through a largely neglected material, a study of the

urbanisation of sand in Accra generates an expanded understanding of urbanisation, extraction and urban-extractive processes.

I subsequently turned to the first of three empirical chapters, which deals specifically with the extraction of sand. The chapter opened with a narrative of the shifting contours of sandpit and city – a narrative that reigned supreme throughout my fieldwork. This provided an important starting point for thinking through the relationships between extraction and urbanisation more broadly. This chapter, however, intended to flesh out this process in greater depth by thinking through the extraction process. Using ethnographic insights from moving with *Piam*, as well as interviews with government officials, I exposed the socio-natural politics through which sand is extracted from the shifting edges of Accra. Through a geosocial analysis, the chapter exposed the ‘deep time of the city’s socionatural evolution’ (Mendelsohn, 2018: 456). Through ethnographic detail of the physical unearthing sand, moving between sandpits and the contestations that emerged on the ground, I argued that the land from which Accra’s sand is extracted is geologically uneven, ecologically fluxing and implicated in a postcolonial politics of disputed land ownership and access. From here, I argued that while these underlying socio-natural facets of land tend to govern the extraction process, the shifting nature of the sandpit demands that its spaces are repeatedly renegotiated as they moves across the city’s moving edges. This opens it up to constant re-making and in this respect, I situated the shifting sandpit as an ‘aperture, an opening, a possibility’ – or indeed, its own kind of postcolonial hole (De Boeck, 2017:151). Together, insights from this chapter served to build a geosocial analysis in contemporary Accra – beyond the spaces and materials which have tended to take centre stage in past and present Ghana – meanwhile, exposing the links between extraction and urbanisation through a situated, postcolonial UPE.



Image 78 – Contemplating.

Chapter five engaged with the broader labours of sand, using urban labour to think about the ways in which sand is brought into the urban realm. The chapter opened with an extended ethnographic account of Cynthia's life and her struggles to secure a home and a livelihood in the city, set in the context of similar struggles experienced by individuals at Awoshie Junction. The chapter detailed the ways in which value is extracted from the shifting sandpit and sand itself as it moves across the city, thus exposing the multiple means through which sand emerges as a source of livelihood for a broad set of individuals beyond the contractors and tippers. While exposing the sheer energy and improvisation required to make a living in Accra, I also argued that these labour practices surrounding sand enable us to extend the meaning of extraction beyond its more obvious deployment in the context of sand mining, to consider extraction as an emergent set of strategies for claiming value embedded in otherwise exclusive transactions. Drawing on the work of Ferguson (2015), I suggested that the detail of the extractive economies of sand may contribute to our understanding of contemporary livelihoods and labour in the city, meanwhile rendering visible a political aesthetic of rights and distribution. In this vein, I argued that if cities continue to experience population growth and yet offering limited employment opportunities – whatever that may constitute – perhaps the city may be rethought as a place of extraction – indeed, as a place for claiming value and demanding income.

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Image 79 - Piam employees.

The final empirical chapter employed the notion of anxiety to capture a set of dynamics embedded in the urbanisation of sand in contemporary Accra. This chapter opened with Sadiq's anxious moves to secure a plot of land and build a concrete home, which I suggested were not unique and rather reflected a much broader aspiration in the city. Meanwhile, the chapter argued that as sand is urbanised in Accra, it gives rise to a vast set of anxieties, thus suggesting that the urbanisation of sand may be best captured through anxiety's double meaning: as both a longing and an apprehension. I contended that anxiety allows us to move across the many dimensions of the sand's position in Accra and through doing so, generates a view of the city that captures the uneasy transformations that undergird its material production. I situated this chapter in a discussion surrounding anxiety and African cities, thinking through both the historical and contemporary anxieties that have been and are projected onto urban spaces across the continent. In contrast, I offered a brief selection of more recent academic work, which I suggested departed from these projections, arguing that reading the anxious city through the realm of sand has much to offer in re-positioning the meaning of anxiety in a contemporary African city. In this way, I turned to an analysis of anxiety, grounded in the anxious making, unmaking and remaking of Accra's shifting landscape. I discussed the growing concerns surrounding the durability of concrete cities, the widespread degradation of the environment, the loss of farmland, illegal sand winning practices and the state's anxious attempts to govern urban peripheries. I showed that these anxieties find themselves connected in uneasy constellations, spanning the city, nation and planet and remain locked into the specific socio-natural and political conditions embedded in different cities. In the end, I made a call for an analysis of the anxious ante-lives of urban elsewhere.

By situating sand as the ante-life of urban form and indeed the city's constitutive outside, the chapters have thus exposed the means and terms through which sand becomes part of the city of Accra, prior to its emergence as recognisable urban form. The chapters have shown that sand – and therefore the city – is not inevitable, but rather surfaces at the interface of geological deep time, historical trajectories and socio-political presents. Moreover, by engaging with a material integral to the city's form and indeed, writing this story from a West African city, the thesis has extended a geosocial analysis into the present, moving beyond the prized minerals which have tended to dominate past and present geosocial renditions of Ghana and elsewhere. In doing so, it has exposed the significance of domestic practices of extraction and consumption more broadly and the ways in which these extractive modes intersect with the city and its inhabitants – be it through the

generation of revenue, through building practices, through labour regimes, through processes of displacement and violence, through environmental degradation or through governing prerogatives.

The thesis also draws out the fundamentally material links between urban form and extraction, here supporting the impetus for initiating dialogue between extractivism and urbanism. These kind of material links, I suggest, would do well to be further explored, most likely in closer conversation with UPE. Through its detailed analysis of socio-natural processes, the thesis also elicits significant contributions to UPE itself. Firstly, by working with sand, the thesis advocates for a stronger emphasis on the geo in UPE analyses, thinking more specifically through the geological deep time of the city. Moreover, it has exposed the importance of theorising power forms beyond those deployed in classical Marxist UPE, instead rendering visible the significance of [post]colonial histories of land and society and the ways in which these fundamentally shape the terms on which sand is extracted. This serves well to respond to recent calls to both provincialise UPE (Lawhon et al, 2014) and write a UPE from African cities (Myers, 2016), while suggesting more broadly that UPE analyses must remain grounded in the specific spaces in which they seek to analyse. The thesis has also detailed rather more unexpected fields of inquiry, including the practices and politics of labour, as well as innovative modes of scripting the shifting landscapes of the city in ways that remain close to the lives of urban inhabitants. These engagements have generated fruitful insights, including exposing the labours embedded in an otherwise neglected dimension of the urban economy, the potential politics embedded therein, and potentially comparative modes of scripting the anxious worlds of [African] cities. Thus, together, looking to the ante-lives of urban form through the prism of sand's urbanisation in Accra, has served well to expand our understanding of urbanisation as a set of unfolding interfaces between geologic forces, ecological processes, historical conditions, cultural forms and political-economic regimes, meanwhile offering up novel ways of reading the unfolding landscapes of Accra's 'urban now' (Baloji and De Boeck, 2017).

The chapters and their contributions may also be understood an ode to the value of ethnographic work as a method which inspires us to remain attune to the things and ideas that matter in the places we seek to write from – in ways that may have indeed been rendered invisible through other ways of seeing, analysing and deploying theory. More specifically, by reflecting on the ethics of ethnographic practice and modes of reflexivity, the thesis has also pointed to a constitutive outside to research itself. Indeed, the unknowns of what I did not know, what I could not know and the impact of my embodied presence in the field, together may be read as a constitutive outside itself – 'a condition of emergence, an outside that being inside creates 'radical undecidability'' (Roy, 2011:224). This condition of undecidability is one that must be taken seriously to produce work that is both rigorous yet open, generative yet revisable and continuously etching towards an ever-

vanishing point of ethical engagement. Read together then, I argue that the thesis's findings have articulated a contribution at the intersection of UPE, geosocial analyses, extractivism, [African] urbanism, postcolonialism, labour practices and ethnography.

EXTRACTIVE FUTURES

In this brief section, I consider scope for future work in relation to the findings presented in this thesis. Firstly, I suggest that tracking the dynamics of high quality river sand would be an important way of drawing out the multiple geographies of sand in Accra. Indeed, as was explained to me early in my research, high-end concrete projects in Accra would likely make use of river sand, sourced from the Volta Region. Understanding how these extraction processes, labours and anxieties differed or coalesced with what I have found here would add depth to a reading of the city as a differentiated geosocial, socio-natural process, perhaps here introducing ideas around class as a potential differentiator. Secondly, following a return to *Build Africa Block Factory*, it became increasingly apparent that future work would do well to research the dynamics of block factories in greater depth: seeking to understand their geographies of production, consumption and labour. Thirdly, and more broadly, explicitly extending a geosocial analysis of the city through the prism of other extractive resources could generate space for critical comparison and theoretical fine-tuning. Indeed, as rare earth minerals are increasingly fore-fronted in the anxious worlds of extractive futures – set in the context of climate and geo-political crises (World Bank, 2017) – I express particular interest in detailing the unfolding relationships between rare earth minerals and urbanisation. Finally, I suggest that reading 'shifting sands' as an urban condition more broadly offers much scope in detailing the unfolding of urban worlds across the planet. I detail this in greater depth in the thesis' remaining paragraphs.

SHIFTING SANDS AS AN URBAN CONDITION

Throughout the thesis, I have used sand as an entry point into the ante-lives of urban form, exposing the processes through which sand becomes urbanised in Accra and the implications of this manifestation. In chapter four, I detailed the ways in which the unearthing of sand remains embedded in a postcolonial socio-natural politics of land, while sand's extraction simultaneously re-shapes this politics. In chapter five, I showed how sand's extraction and movement across the city emerged as a platform for value extraction for labouring inhabitants of the city and in chapter six, I exposed the anxious worlds generated through the making of a city of sand. Thus, together, the chapters expose the spaces of Accra as a set of shifting landscapes – as shifting landscapes of socio-natural remaking, labour and anxiety.

I also suggest that these shifting landscapes of sand must be read in the context of the fluctuating contours of places like Awoshie Junction; the spaces and inhabitants of which remain central to this thesis. At Awoshie Junction, threats of removal under electricity transmission wires and displacements by the church headquarters revealed this urban landscape as unstable, unsteady and in a mode of constant remaking. At times, the ground at Awoshie was literally shifting. Rumbles beneath the ground, emanating from an electricity wire that ran beneath the junction were eventually eclipsed by an explosion, which parted the earth and fractured the ground beneath Betsy's salon. Like the potholed roads, this fracture was filled with sand. People had also moved. While Sadiq was still in his roadside spot and his brother still in Dubai, Cynthia had left the junction, spending considerable time in Somanya. It was a reminder that what I had captured at Awoshie Junction was a moment in time and the landscape here, its people and its labours had indeed shifted. Together, I suggest that these shifting landscapes presented here may be read as an urban condition more broadly: as the shifting sands of the city. Indeed, while shifting sands captures the very real material shifting of sand throughout Accra – its extraction, its mobility, its displacement – it also denotes a set of landscapes under constant re-/un-/making. However, as I stress below, the shifting landscapes of the city cannot be read as a scribbling out of that which exists – of a simple erasure. Rather, traces of the old and the now remain as new urban landscapes are given form. This is a point I make below.

The image has been redacted for copyright reasons.

Image 80 - Elusive figures.

One afternoon, having shifted sand from the pit to the city, Francis, Kwaku and myself headed back towards Awoshie Junction. By this point, the Baah Yard Tipper Station was no longer occupying the space immediately adjacent to the church – the space it had occupied for at least twenty years. Bar a few cars, this space was currently vacant and was now demarcated by the building of a concrete block wall, with rumours speculating that the space was soon to be a carpark. Despite this displacement, the tippers remained present in the vicinity, occupying the space immediately beyond the wall, while many trucks continued to line the side of the road. Indeed, while the tipper station as it was once known was indeed displaced, traces of the station were a little tougher to eradicate. Here, tippers sat in the back of trucks and awaited custom, re-directing prospective sand buyers to their new station at Ablekuma, further north-west towards Ashalaja. I had recently passed this station, with Francis pointing out their new space. I asked why they were not yet all stationed there. He explained that some of them still go to Baah Yard to tell customers that they have moved, given the long-standing association with sand and this particular station. Moreover, only part of the new station at Ablekuma was ready, as it too was engaged in a dispute. As I would learn, the tippers had

purchased this land at Ablekuma some time ago, however, given they had not been occupying it, the space was gradually inhabited by a series of shop keepers, who, by virtue of their timely presence there had resisted complete removal by the station. This small story hints at the connected shifting landscapes of Accra. The church displaced Baah Yard Tipper Station, while the new station set in motion struggles elsewhere. Yet this story also exposes the resistances embedded in shifting landscapes: the residues and traces of the old and the now as new urban landscapes take shape.

The notion of history, I suggest, is embedded in the qualities of sand itself. Indeed, while sand may shift, it is not devoid of historical content. Rather, as Agard-Jones reminds us, '[t]oday's sands are yesterday's mountains, coral reefs, and outcroppings of stone' (2012:326). This is what allows geologist Raymond Siever to write, 'sand grains have no souls, but they are reincarnated' (Seiver, 1998:55, quoted in Beiser, 2018:7). Thus, to read the city as a set of shifting sands is to read them as landscapes continuously moving, yet ever-connected to multiple histories in integral ways. Indeed, I argue that positioning shifting sands as an urban condition points to both the ongoing un- and re-making of urban landscapes and the persistent presence of traces of pasts – both near and far. In this way, shifting sands offers an important reminder that urban studies must remain attune to both the inherently ephemeral nature of the spaces we study *and* the ways in which the shifting landscapes of the city remain connected to the heres and elsewheres of both the past and the present. Throughout the chapters presented in this thesis, I have attempted to move between this two-fold dimension of the shifting sands of the city, exposing the re- and un-making of Accra's landscapes, meanwhile situating these shifts in the deep-time of the city's socio-natural evolution, the specificity of [pre- and post-] colonial histories, as well as social histories which tend to defy easy categorisation.

The centrality of sand in the notion of shifting sands is also a testament to reading the city, in part, through its materiality, while sand's granular texture reminds us of the need to fine-tune this understanding such that we may begin to grasp something of the city's multiplicity. By virtue, this ongoing fine-tuning also marks a commitment to a deeply nuanced reading of power in and through the landscapes in which it circulates, as opposed to subscribing to renditions of power structures already assumed. Thus, together, reading Accra as a set of shifting sands exposes the multiplicity of times and spaces etched onto the urban contemporary, in the process, rendering visible the materiality of the city and the myriad power formations – be those the geosocial, the socio-natural, colonial, land-based, or state-centred – that animate the liveliness of the city in and through which inhabitants carve out a meaningful existence. In the end, I suggest that reading the city as a set of shifting sands offers us not only a strong grasp of a contemporary condition but also a space to both

unearth and indeed enliven possible urban futures, which remain always already embedded in the contours of our 'urban now' (Baloji and De Boeck, 2017).

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