

*Anders Ese*

**Uncovering the  
Urban Unknown**

Mapping methods in  
popular settlements in Nairobi

PhD thesis, AHO

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## Introduction

*Peter opens the door with a slight kick to the bottom half of the wooden frame. “Come on in, but mind the step. It’s a bit dark in here – the floor’s uneven”. I follow him into a windowless, unlit corridor. The corrugated iron roof dips low in front of the entrance. I duck my head to enter. Inside the corridor the walls and floor are of mud. It smells cool and damp. Plaster is chipping off of the walls. There are several doors on either side. The corridor continues into the dark. He pushes open the first door to the left, and lets light into the corridor. “Karibu. Welcome to my place.” He smiles, removes a laptop and some papers from the bed to make more room. “I try to work when there’s electricity,” he explains. “The batteries aren’t too good on this one.” He puts the laptop away and parts the curtains in front of the lone window to let the light in. The room is pleasant enough, with a couple of chairs and a cupboard in addition to the bed. The walls are painted. Linoleum covers the floor. “Well, I needed a place of my own. I couldn’t continue staying with my mother.” Peter motions across the road to his mother’s place. “Hers is nicer of course. It’s one of the old Majengo houses. Mine is a more recent extension. The water seeps in sometimes, but it’s cheaper – but ok, not as cheap as down in Digo.” He points. “In any case, we have good relations with our land-ladies. We fix what needs mending and the landlady tells us to let her know how much it costs – then she reimburses us. It’s a good relationship. My mother has known her landlady since they were kids, when both of their parents used to live there together.” He thinks about it. “In fact, I would say they are friends.” We look over some of his web design work, then walk back out into the cramped dead-end courtyard weaving our way back through narrow passages onto the main thoroughfare in Sofia. The houses facing us here are more structured, old and worn, but in a dignified way. Behind us a seemingly chaotic and random maze of building extensions. The structures here are more recent but their construction is not as thorough as in the older houses from the 1920s.*

*I’m in Majengo, Pumwani, an old African settlement in Nairobi. I am researching how and what for mapping methods are used to gain knowledge about popular settlements. My aim is to try to understand more about*

*mapping methods by attempting to test them in the field. How do they work, and in which contexts would they be used?*

*I walk with Peter the few metres over to his mother's house, or rather his mother's landlady's house. His mother rents two rooms. Seven other tenants occupy the remaining rooms. The landlady I'm told lives elsewhere but relations are good. She comes by every now and then to see his mother and her other friends in Pumwani. The house is slightly set back from the street, making room for a washing point and a front porch duka – a kiosk. In the months to come I visit her place often. Every time the front porch area is lively, full of kids, neighbours, and friends.*

*Peter's friends come by. We buy a few sodas from the duka, and sit down to talk in the cool shade of the veranda. I hand around drinks.*

*I gaze at the myriad of housing. "It would be a trying task to map all of these structures," I say. Trying but possible. But what could be gained from such a mapping? "You could get to know the layout of the community, and possibly find out about the condition of buildings. But would that enable intervention?"*

*Peter paused to consider it. "Well, you'd need to sit down with everybody to see what they want. "Perhaps someone wants a lot done, others not so much. Remember the rent increases once the landlords and landladies renovate too much. And these relations go back generations".*

*"So is that why the houses have never been properly renovated during the 90 years they have existed?" I ask.*

*One of Peter's friends shakes his head. "It's because people don't have jobs. No money to pay rent. This is the only place we can afford."*

*"So what would happen if the place were redeveloped? Would that be a good thing or a bad thing?" I ask.*

*The answers were many and varied.*

*"It would be bad," says one. "The Somalis will come and buy them out and they will be forced to sell."*

*"It would be good," says another. "People want modern high rises to live in. The Majengo houses are very poor."*

*"It depends," says someone else. "If they could be allowed to rebuild the Majengo houses at little cost with permanent materials, then maybe... After all, this place has a history. It has ujamaa."*

*I ponder this in silence.*

*So we would need to learn about people's aspirations. And we would need to learn about their relations. Relations between tenants and landlords, and the mechanisms of the local rent system. What kind of mapping exercises could we carry out to understand those issues better? What about plot boundaries - could those be mapped? Probably. But what would that tell us?*

*The landlords and landladies all have seem to have their paperwork in order, but what about the extensions that clearly cut off road lines and block alleyways? Why have those been built, and how have the landlords and landladies been allowed to build them? Are they politically powerful? Are they moneyed? Some, I'm told don't live in Pumwani any more, just collecting rent and waiting for the property value to go up. Other landlords and landladies don't seem to be rich at all. Some live together with their tenants. They grew up together. They are friends. And they don't stay close together because they belong to the same ethnic group.*

*My impromptu discussion group has transitioned into Swahili in my absence. They switch back to English to include me.*

*"You rarely hear anyone speak a vernacular here in Pumwani," says Peter. They all agree. "In Pumwani we speak Swahili."*

*Now I am intrigued. "That is rather different from other popular settlements in Nairobi. How has that come about? That ought to be rather important. And what about all those landladies? Isn't that an anomaly in a paternalistic culture."*

*"Well, they've been here a long time. Their mothers, and their grandmothers before that," the guys inform me.*

*Cohesion, ujamaa, the Swahili, the buildings, their state, lack of repair, the functioning aspects of this community. They all blend together. Once you start asking questions, what starts out as a rather simple mapping of houses, unleashes a landslide of other maps. Mappings of people, mapping relations, mapping money, mapping power, all overlaid on maps of physical structures.*

*When what we know is that we know very little about a place, we need knowledge of other things than what can be placed on a cadastral map. Things that can help us understand physical environments better. Mapping physical environments is perhaps easy. The question remains: what are we missing? What is it that remains unmapped? And how would you go about making those kinds of maps?*



## THE NARRATIVE OF THIS THESIS

In this thesis, I aim through discussions of the use of mapping methods in popular settlements to critically examine the usefulness and versatility of certain mapping efforts. There exist extensive discourses on both mapping and popular settlements but rarely do those discourses focus on how and why mapping is used to explore popular settlements. I will explore mapping efforts carried out in popular settlements in Nairobi, Kenya, with a particular focus on Pumwani, the oldest legal African settlement in the city. Two main questions have been instructive to the research. 1) Are there examples of mapping efforts carried out in popular settlements in Nairobi that better than others explain the social, economic, or spatial practices unique to popular settlements, and 2) How can urban planners use historical mapping methods as an inroad to suggesting strategies for interventions in popular settlements?

For the purpose of this thesis I will use the term *popular settlements* to describe marginalised, often poor urban neighbourhoods or communities<sup>1</sup>. These communities are often socially, physically, and demographically diverse – with a shared commonality in that they are populous and are home to a large number of city dwellers.

What I suggest in this thesis is that there can exist compelling connections between the issues broached by these two questions, and that alternative mapping methods can be proposed.

The alternative mapping method presented in this thesis is in part borne out of the impression that a great number of mapping exercises, reports, and academic works on popular settlements generally fail to nuance the multiplicity of such neighbourhoods. A great deal of effort is put into describing the dynamic nature of settlements and cunning of its inhabitants. Adaptability, prowess, and ingenuity are all labels used to positively describe residents in popular settlements. With such descriptions also come the unifying label of poverty, as in: “residents have to show a unique sense of ingenuity and resilience because they are poor.”

There is no denying that residents in popular settlements are poor. But with such renditions of conditions in popular settlements we tend to overlook the multiple variations and differences that can exist internally between residents. Descriptions of difference – vitally important to understand for planners seeking to do interventions in popular settlements – seem to be lacking from

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<sup>1</sup> These areas are often called ‘slums’ or ‘informal settlements’ which I would argue are terms that are misleading and inaccurate. ‘Slums’ are conceived of as homogenous, but in actuality the social and economic wherewithal of residents can vary greatly. Neither are popular settlements necessarily informal, as in the case of Nairobi, where many popular settlements are formally planned housing areas.

many mapping accounts. It is to this I propose an alternative mapping method that merges planning, history, and social sciences and seeks to better convey and explain this multiplicity.

This thesis is divided into two parts. In Part I, I look at what kind of mapping efforts have been carried out by others in an historical perspective, moving from the global to the local. In Part II I turn the focus to my own mapping effort, where I attempt to synthesise mapping methods based on the reviews and analyses carried out in Part I.

Mapping in the way it is dealt with in this thesis means two things. In Part I it refers to the different ways in which information in popular settlements is collected and analysed. The mapping may be of a visual kind, or it may be text based. It may come in the form of an historical document from the 1930s, or it may be a more recent participatory analysis. *What binds them is that they allow us to collect information about a community in ways that are useful to analysis, and that this analysis (dated or fashionable), presented through a textual or image-based narrative, presents a visualisation of a settlement, often laying the foundation for future interventions.*

In Part II mapping is about visualising variables in a discrete way assisted by historical research: by forcing the analyst to create discrete sets of socio-economic categories and visualising these categories in relation to one another and in relation to spatial developments. This does not produce a complete ethnography of a settlement. However, I would argue that it does create useful guidelines for planning and design. Such guidelines are advantageous when intervening in popular settlements because the logic of planning requires interventions to be precise. In other words, the mapping allows for a narrowing down of the plethora of topics and issues at stake in a popular settlement to a few discrete categories – and a visualisation of these – in order to facilitate for more precise interventions.

My thesis will begin by looking at a number of arguments made in academic discourse about the nature of mapping in relation to (a discourse on) the global South and in particular popular settlements. The investigation asks what it is in the academic discourse on maps and mapping methods that is important when discussing mapping in popular settlements. *The discourse shows that there is good reason for planning professionals and those dealing with interventions in popular settlements to better understand the power of mapping. Mapping provides planning with a set of guidelines for the type and location of critical interventions. Such guidelines can be produced using a range of methods entailing data collection and analysis, producing a variety of results.*

In order to make clearer the range of methods used when mapping popular settlements, and what kinds of results different approaches produce, the following was asked: what mapping methods have historically been used in Nairobi to map (and monitor) developments in popular settlements, and; are there visible trends in mapping methods utilised in Nairobi, i.e. is it possible to distinguish between mapping methods in terms of historical periods? The resulting periodization of mapping efforts borrows its analytical logic from Harley (2001), who critically examines the map in relation to context: the context of the cartographer (the mapper), the context of other maps, and the context of society. By using examples of mapping efforts in Nairobi I analyse what is being mapped, how issues are being mapped, and ultimately why they are being mapped. This analysis highlights the close relationship between mapping and politics since the turn of the 19<sup>th</sup> Century in Nairobi. By highlighting the ideological and political *raison d'être* of Government and non-governmental organisations, their approaches to mapping popular settlements are intrinsically connected to worldviews, policies, and trends.

From this periodization the thesis takes a closer look at the most recent period in mapping popular settlements, a period where participatory methods and digital tools have become increasingly popular. Questions related to this period were amongst others: what are the different approaches and methods available to mappers in popular settlements today? Which are most used, and what schools of thought do these spring out of? Also: in light of the various data collections and analysis current mapping efforts provide, can the usefulness of their approaches be gauged in relation to their initial intentions (i.e. their reasoning for carrying out the mapping exercise)?

I also turn to current, popular methods of participatory mapping to show that there are important distinctions to be made between different participatory mapping methods in terms of data collection and how they lend themselves to analysis. Through the review I also point to the incongruity between mapping methods that on the one hand present participation as a way of ensuring flexibility through contextual grounding, and on the other hand provide an inflexible, schematic system for carrying out mapping. Furthermore, the review shows that there is reason to question the validity of arguments held by some development camps that participatory mapping methods are better than conventional mapping methods at uncovering 'truths' about settlements.

The detailed review of current mapping efforts in popular settlements also uncovers a few examples of how mapping exercises can be rigorous, participatory, and flexible at the same time. Substantial amounts of the academic efforts devoted to the discourse on popular settlements focus on how to better understand and cater for the 'different' nature of settlements i.e. providing ample room for the development of particular social, economic

and spatial practices that have emerged in popular settlements (Simone 2004; Abouhani and Simone 2005; Pieterse 2008). Given the inventory of mapping efforts in Nairobi, both current and historical that this research has provided, I highlight examples of mapping efforts in popular settlements in Nairobi that in useful<sup>2</sup> ways explain the social, economic, or spatial practices unique to popular settlements.

At this point the thesis moves into a discussion of how such methods for mapping popular settlements can be further elucidated<sup>3</sup>. Here, the term mapping takes on its second meaning: the construction of discrete sets of visual, socio-economic categories as a way of uncovering and analysing community. With this I attempt to construct a mapping method for a popular settlement in Nairobi. The mapping method builds on previous work by academics and practitioners from the 1970s and 2000s, and utilises both visual and socio-economic mapping, and asks: can a study of the history of a settlement serve as an integral part of a mapping approach for the urban planning profession? More specifically: can the mapping of a settlement's history be carried out in such a methodical way that it creates a set of categories important to urban planners for mapping settlements?

To this end, a number of the mapping efforts reviewed in this thesis provide some interesting directions. In some mapping efforts historical research serves as an integral part of the mapping approach, and some of these have attempted to extract information from this history (in a manner) that could form the basis for planning based interventions. Based on this, I attempt to synthesise mapping approaches' use of history in data collection and analysis with examples of mapping approaches that can be said to be operational for planners.

As a result I have constructed a three tiered mapping method based on 1) historical research, where 2) current, and 3) future socio-economic issues are mapped out and visualised as a basis for suggesting more appropriate interventions in popular settlements.

With the proposed method I suggest that historical data and its analysis can provide a number of categories and factors on which a mapping of current events can build. Thus, a succinct mapping of current events is provided where critical socio-economic issues are laid bare and given historical linkages. I chose to focus on these issues because clear connections are provided between socio-economic developments and the spatial structures

<sup>2</sup> With 'useful' I mean the way in which mapping may be applied by planners for creating categories and guidelines for interventions. I also use the term 'operational' to signify the same.

<sup>3</sup> See Chapter One for distinctions made in this thesis between methods, approaches, techniques, and tools.

of a community. Also, they highlight the interconnections between local communities and society at large, important to gaining knowledge about the structural forces that shape settlements. These considerations were made clear through a number of channels of investigation, such as desk studies, field observation, and a number of interviews.

With the mapping of histories and current events, two final questions emerge. These are 1) How can this be operationalized, and 2) How can strategies be suggested for interventions in popular settlements?

To answer these final questions this thesis moves into a discussion about constructing possible future scenarios for settlements, based on the logic that planning is (in part) about predicting and formulating the future of a community derived from these maps. Though uncertain, these scenarios allow for a number of possible likely future developments. The process of constructing scenarios can function as a tool for initiating discussions among residents and other stakeholders about the future of a settlement. It is on the basis of such discussions that claims for the future can be made, and interventions can be suggested and designed in keeping with a settlement's histories, present, and possible futures.

## THE CHAPTERS

### Part I

In Part I of this thesis I set out to uncover the breadth of mapping efforts in relation to popular settlements, and to investigate the meaning behind them. Starting on a global scale, I turn my focus towards Nairobi, and the use of mapping methods in popular settlements in this city.

Part I begins with a chapter reviewing mapping based academic literature, where connections are made between this literature and discourse on popular settlements.

Chapter Two is a review of mapping efforts in Nairobi from the 1910s to the 1990s, divided into four periods that showcase distinct politics, approaches to popular settlements, and mapping efforts in popular settlements.

In Chapter Three I address the current period of mapping efforts in Nairobi, which given its immediacy arguably makes it a period from which we should build in our efforts to make mapping methods more useful to planning interventions in popular settlements. I have therefore chosen to provide the review of this period in a chapter of its own.

The final chapter in Part I, Chapter Four, examines the growth of digital platforms in mapping popular settlements, particularly social media based platforms, specifically the use of Ushahidi and OpenStreetMap in Kibera.

### Part II

In Part II I connect historical investigations with methodological aspects of some existing mapping efforts as an experiment to see if anything substantial can be said about a given settlement - and if any strategies can be suggested in such a popular settlement to cater for interventions.

My aim is to explore further a possible method for mapping popular settlements. This exploration of method is informed by thematic and geographic foci: firstly, the mapping I choose to emphasise is of a socio-economic nature and secondly, the popular settlement centre on is Pumwani, an urban poor community in Nairobi, Kenya.

Chapter Five sets out to explain the intention of the mapping method constructed for this thesis, and the possibilities provided to planners by making in depth connections between past, present, and future developments in a settlement. Secondly, the chapter provides an iteration of the methodical steps taken in the mapping, and a discussion of how text and visual material work together as tools for collecting and analysing data, as well as for presenting results.

Chapter Six serves as a simple introduction to the case area, while also serving as an example of the close connection between text and image as tools for mapping.

Chapter Seven is an in depth review of historical developments in Pumwani, divided into four periods. It draws on discussions regarding the historical development of spatial patterns in Nairobi, tracing these down to the implications they have had on Pumwani. The chapter exemplifies how historical research can provide distinct classifications for further mapping efforts by establishing discrete historical categories of a socio-economic character important to the settlement.

In Chapter Eight Pumwani's history is brought up to the present, and a thorough examination of present-day Pumwani is provided. Three distinct topics, all intrinsically connected to the historical mapping in Chapter Seven, are examined using amongst others qualitative interviews and asset-based mapping methods: factors influencing social difference in Pumwani, social groups, and key issues in the settlement. By way of examples the mapping

discusses what the juxtaposition of text with visualisation might add to the method, and how the discrete categories provided in Chapter Seven are updated to the present.

### **Part III**

Part III holds a final conclusion and an afterword that discusses the possible uses of the proposed mapping method for planners and architects seeking to intervene in popular settlements such as Pumwani. The afterword looks into Pumwani's future, and discusses through example the usability of scenario planning as a method for operationalizing the large database provided by the mapping efforts in Chapters Seven and Eight. Central to the method is the creation of scenarios where external and internal societal developments affecting Pumwani are highlighted. These scenarios aim to be a platform for informed dialogue regarding strategies and interventions in a settlement.

## **PART I**

### **Mapping approaches**

# 1. Unfolding the Map

## WHY MAPPING?

A number of academic works that utilise mapping in popular settlements focus on developments in popular settlements and attempt to explain such developments by use of mapping methods. By comparison, this thesis focuses on the mapping methods themselves: how they are utilised in popular settlements, and what that means for our understanding of such settlements.

But why is it considered important to map popular settlements? Historical material from Nairobi reveals that mapping efforts in popular settlements have been common practice for decades. The premises for mapping – why we map – and the approaches to mapping – how we map – have changed periodically. While in previous decades mapping would for example be used to back arguments for externally led, complete reconstruction of popular settlements, currently we are fixed in a period where local participatory interventions are seen as best practice.

Goux (2010) describes actions towards popular settlements by the urban development sector as being divided into three historical phases; 1950s-70s, characterised by social housing projects and the demolition of unwanted settlements; 1970s-1980s, characterised by selling rehabilitated, pre-planned plots with basic services; and the last phase, which we are currently in, characterised by upgrading and legal recognition. The current paradigm demands that professionals in the urban development sector have an astute knowledge of current conditions in popular settlements – be they physical or social – in order for upgrading schemes to function properly. Thus, the need for reliable, relevant information about conditions in popular settlements becomes pressing.

In this chapter, I will review some selected critiques of global, historical mapping efforts. These critiques bring about theoretical discussions that I believe have implications for mapping popular settlements and informality, but that may not be problematized enough during practical mapping exercises in such settlements.

The discussions revolve around the following five themes; what the term *mapping* means, and how broadly we can define ‘mapping’; discussions regarding the mapping of physical and non-physical attributes, variables and relationships – and what kinds of non-physical variables and attributes will be focused on in this thesis; discussions of historical trends and political implications of mapping related to the power of maps and their propositional nature; discussions regarding some particular weaknesses that are of importance when examining mapping in relation to popular settlements, such as time, scale, social representation, visual representation, and digital aspects<sup>1</sup>; and semantic discussions regarding how mapping can be construed as approaches, methods, techniques, and tools.

#### MAPPING THE PHYSICAL AND NON-PHYSICAL

When I refer to mapping in the context of this thesis, I am not interested as much in the cadastral, planning-based representations of physical structures, but rather the description and visualisation of social attributes, variables, and relationships. Mappings of social, economical, political, and cultural structures are important to planning and interventions in popular settlements because they have profound impact on place. When referring to mapping in this regard, the term involves a wide range of methods for data collection and analysis.

#### What does mapping mean?

So what does the term ‘mapping’ mean? According to Hall (1991) the definition of what a *map* is has changed drastically over the last century due to scientific developments. Where before the map was a narrow representation of mostly earthbound, geographic features, sciences such as medicine and physics have adopted maps as a way of illustrating and describing things minute to colossal. According to MacEachren, the map can be construed as a *radial* category, useful to explaining anything from quarks to galaxies. Within the two axes suggested by MacEachren in Figure 1.1, there is a clearly defined centre or prototype of what a map is, while

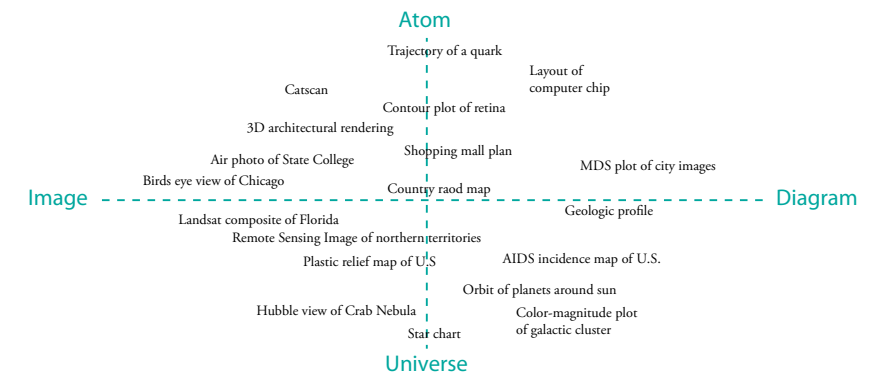


Figure 1.1 Based on MacEachren (2004, 161) showing two *possible* axes for the radial centre of what the map could be.

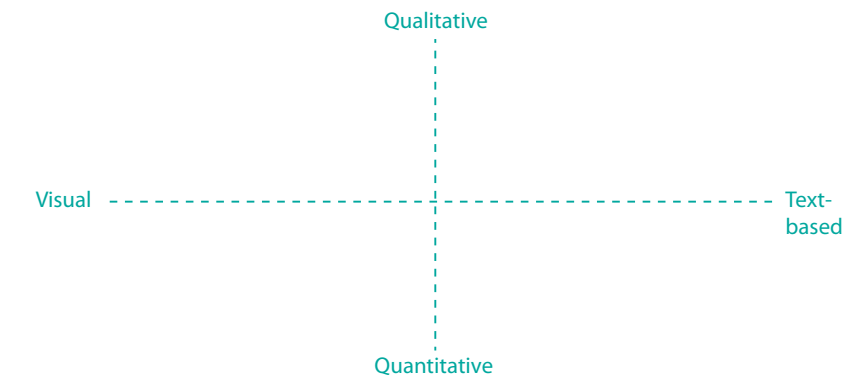


Figure 1.2 Two other possible axes defining the radial centre of what mapping could be in terms of this thesis.

other types of visual material are “category members” defined by the axes. The axes in Figure 1.1: from atom to universe, and from image to diagram, are examples of axes suggested by MacEachren (2004, 161). Figure 1.2 is suggestive of the radial category of mapping central to this thesis with axes spanning from visual to text based, and from qualitative to quantitative.

The term *mapping* not only refers to the act of making a map, it also at times refers to a range of other related activities that come before and after the actual making of a map, for example strategic discussions on what needs to be mapped, initial observations, data collections, analysis, as well as reading of maps, and visual reiterations to make clearer certain findings. Based on an interpretation and synthesis of MacEachren (2004) and Hellevik (2003), Figure 1.3 depicts what lies within the scope of mapping: a map of mapping

<sup>1</sup> The importance of mapping popular settlements also invariably relates to legal debates of ownership and security of tenure: aspects that are seen as instrumental to eradicating urban poverty (Goux, 2010). Ownership in such neighbourhoods is in general a contested issue fraught with complexity and claims that have roots in overlapping jurisdictions, corruption, and power struggles (see e.g. Hake 1977). A discussion of mapping and legal rights is well outside the scope of this thesis, but it is still important to acknowledge the gravity of such issues.

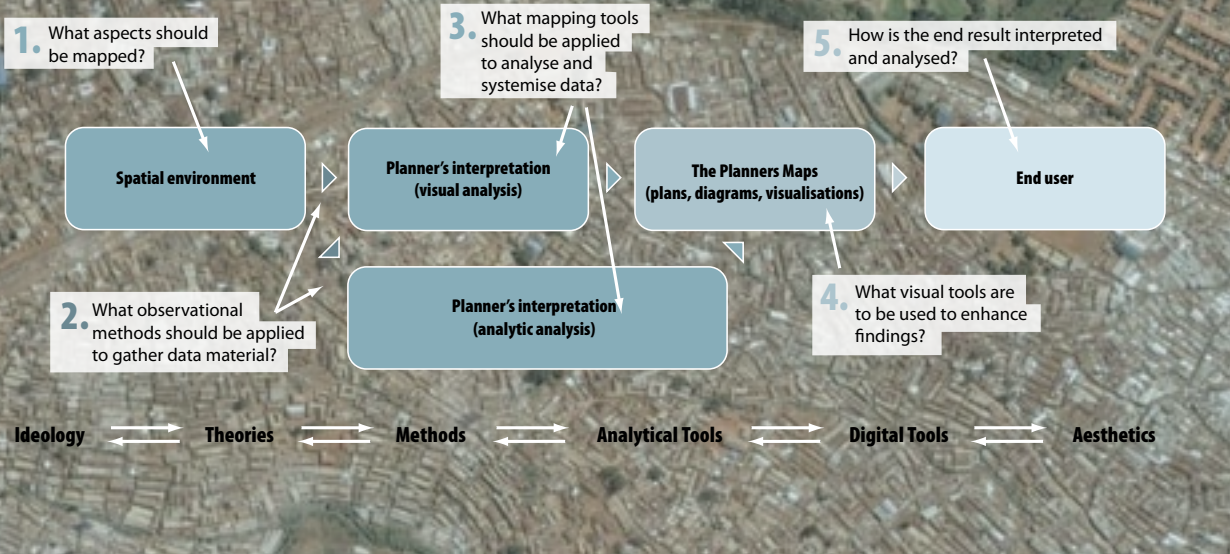


Figure 1.3 What is mapping? Synthesis of MacEachren (2004) and Hellevik (2003). The interest of this thesis leans to the left.

if you will. It invokes a series of questions central to the act of mapping, some of which are important to the topic of this thesis, for instance: which aspects of a settlement should be mapped, what methods should be applied to gather data, what methods or tools should be used to systematise and analyse data, and what visual tools could possibly be used to convey findings?

According to Wood, these questions relate to the intrasignificant codes of mapping, i.e. the temporal (relating to time: “when”), tectonic (relating to space: “where”) and iconic (relating to attributes: “what”) aspects of what goes *into* a map. In addition, Wood points out mapping also has extrasignificant codes, i.e. what comes *out of* a map. Here historical (relating to time: “when”), topical (relating to space: “where”), and thematic (relating to attributes: “what”) issues affect the map-readers interpretation of the map. What comes out of a map – *the meaning of maps* in Wood’s words – is of importance to the discourse on mapping, but are topics that will not be dealt with at any length in this thesis. My research concerns itself with “the other half” of the discourse: what goes into maps, or rather what goes into mapping (Figure 1.4). We need here to distinguish between *maps* and *mapping*.

While a *map* is according to MacEachren a spatial depiction of e.g. geographies (but could also depict things related to medicine, physics, astronomy, etc.), *mapping* has in later years been revised to mean “the organisation and communication of geographically related information” (2004, 155-156). This means that *mapping* is not only confined to producing visual depictions. In other words mapping efforts may produce maps. They may also produce other ‘map-like’ descriptions such as diagrams and images; more quantitative representations such as e.g. charts, matrixes, and graphs; or simply plain text.

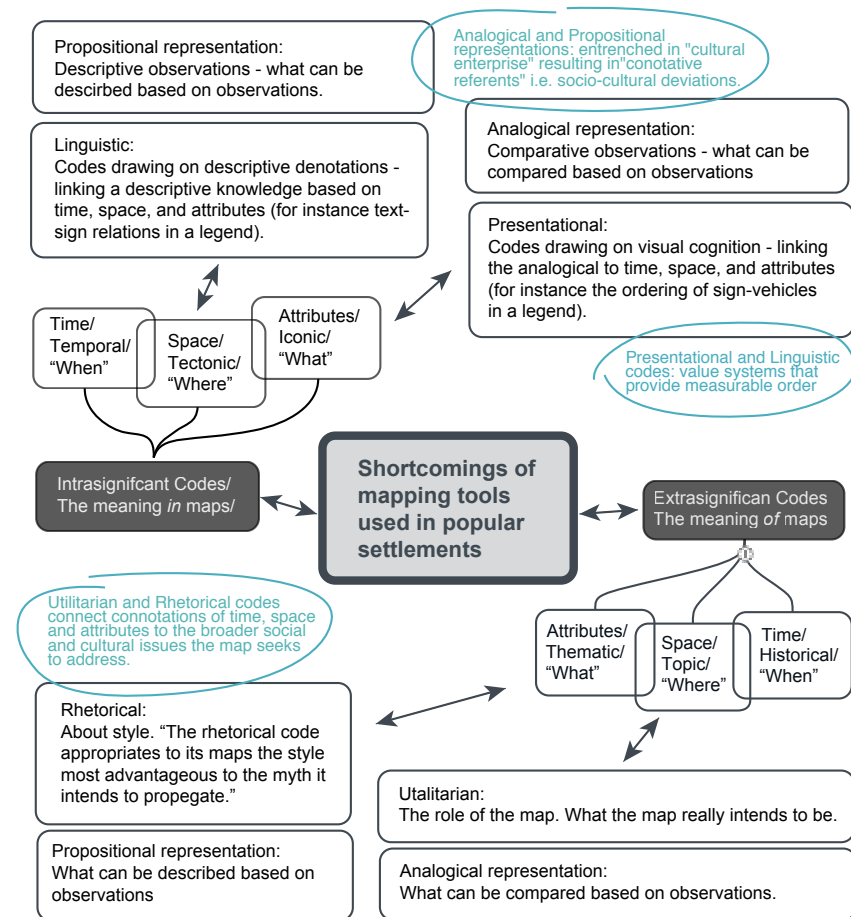


Figure 1.4 Intrasignificant and extrasignificant codes adapted from Wood (1992).

If we take the above to be a current understanding of the breadth of what the term mapping may include, then mapping relates to anything from data collection to analysis. Maps can represent this of this in a number of ways; written texts, diagrams, maps, visualisations (and the reading and interpretation of these). Based on this I will subsequently refer to suitable parts of the reports, theses, studies, appraisals, inventories, memos, recommendations, assessments, surveys or censuses reviewed in this thesis as *mapping efforts*. Many of these are text based and do not include images. They are however highly specific attempts at collecting, ordering, and portraying data about geographic place, and are thus in keeping with MacEachren and others’ definition of the term<sup>2</sup>.

<sup>2</sup> MacEachren (2004, 155-156) refers to the International Cartographic Association (ICA), Board 1989, and Taylor 1991.

## A SELECTIVE REVIEW OF MAPPING CRITIQUES

There exists a large body of academic literature critically examining mapping, and topics critical to mapping. The discussion in this section attempts to broadly summarise some of these critiques, and what implications such have for this thesis. Many of these debates relate to the history of maps and mapping efforts. Such historical evidence is important to elucidate because it critically frames current discussion about mapping and more importantly, it can be helpful to critically framing discussions about mapping efforts in popular settlements.

### Harley's three contexts

It is not uncommon to academic discourse on mapping and maps to centre on the uncovering of lies (c.f. Mark Monmonier's *How to lie with maps* (1996)). But there is more to the analysis of mapping says Harley than categorising it as "slippery (...) dangerous or unreliable" (2001, 35). Above, mapping is defined as a radial category with axes covering text-based and visual material, as well as qualitative and quantitative data and analysis. With mapping relating to such axes, intimate and complicated relations occur between what we want to map and what we want to argue, as well as how we map and how we construct arguments. The intents and values imbued in the text and context of maps are important to uncover to understand the arguments in maps, says Harley.

To get to the core of such issues Harley suggests three kinds of contexts in which maps can be analysed. These are, 1) the context of the cartographer/mapper, 2) the context of other mapping efforts and, 3) the context of society (2001, 38). These contexts relate to social and political aspects of mapping, and are related to issues and expressions of power and influence. These matters are important when critically examining mapping efforts and shed light on the map as "a social construction of the world expressed through the medium of cartography" (2001, 35). Harley applies "a basic rule of historical method" to the interpretation of maps (2001, 37). In our rendition of the term *mapping* this would imply: 'expressing a social construction of the world through mediums such as maps and texts'.

With regards to the context of the cartographer, multiple authorships, the professions of these authors, and their life experiences may all affect the map according to Harley (2001, 38-41). By extension such issues also affect the processes of *mapping*, as I will touch upon in the review of mapping efforts of popular settlements in Nairobi (Chapters Two - Four). In the examples reviewed there are clear differences between mapping methods if comparing early efforts carried out by colonial administrators, and later academic work. The context of the mapper plays an important part in creating these differences.

Harley suggests that maps also can be compared in terms of e.g. their genre, their age/period of creation, and who produces them, in order to learn more about the map itself (2001, 41-44). In the case of historical mapping efforts of popular settlements in Nairobi, comparisons are first and foremost made within time-periods because this is perhaps what differentiates mapping efforts the most. Still, a few genre-based comparisons are made across periods where appropriate (e.g. visually driven mapping efforts or quantitative mapping efforts), as well as comparisons across periods between mapping efforts carried out by e.g. government agencies on the one hand and academic institutions on the other.

In terms of the context of society Harley asks: "what did the map mean to the society that first made and used it?" This is done to reveal the "philosophical, political, or religious outlook of the period" (2001, 46). In the case of mapping efforts in Nairobi, each period is representative of distinct social and political views in Kenya. Mapping efforts are used to argue for a change in policies or to underpin existing policies in relation to popular settlements. But policies also affect the kinds of mapping efforts carried out in popular settlements. This dynamic relationship between mapping and policies is what Harley refers to as causal arrows that flow in opposite directions (2001, 44).

The desire to influence the social and political through maps is according to many scholars central to mapping. To map is to choose some data over other data. To map also is to highlight some information, making other information invisible. What follows are a number of issues in relation to Harley's three contexts (e.g. asking questions about how, why, and for whom we map) we are better able to qualitatively judge the contents of maps and not simply classifying them as either true or false. Such an analytic approach is increasingly important when mapping popular settlements: often contentious, often marginalised – and with multiple internal and external interest groups and power struggles. The approach outlined by Harley helps uncover a number of themes that are implicitly brought up in the mapping reviews in the following chapters. These are themes that are particularly important when discussing mapping efforts in popular settlements.

What follows are a number of critical issues regarding the nature of maps and mapping. Here I describe these themes in relation to the broader academic discourses they spring out of: how maps are propositional rather than factual, how maps can be seen as imperial tools for conquest, how mapping efforts were (and are) governed by elites, why and when local participation was historically important, why local participation is important today, how mapping can be used to pass moral judgement and make the case for linear development models, and finally, how the categorical nature of maps can be troublesome when attempting to engage with the unknown. Many of these topics relate to one another, resulting in thematic overlaps between some of the following texts. I am particularly interested in what these following issues imply to the mapping of popular settlements. I will therefore move back and forth between global issues and local examples based in Nairobi.



### The propositional nature of maps

If your grand duchy or tribal area seems tired, run-down, and frayed at the edges, simply take a sheet of paper, plot some cities, roads, and physical features, draw a heavy, distinct boundary around as much territory as you dare claim, color it in, add a name – perhaps reinforced with the impressive prefix “Republic of” – and presto: you are now the leader of a new sovereign, autonomous country. Should anyone doubt it, merely point to the map.

Not only is your new state on paper, it’s on a map, so it must be real.

(Monmonier 1996, 88)

MacEachren discusses the dichotomy of the map as communication and the map as representation, in other words whether maps are used as vehicles for the transfer of knowledge (communication) or as vehicles for the construction of knowledge (representation) (2004, 459). While MacEachren leans towards the latter, Black holds that the discussion of why, what, and for whom we map might better be directed to a discussion of ‘objectivity’ on the one hand, and ‘politicisation’ on the other. Cartography, Black maintains, can be questioned as a science, as it can never claim objectivity (1997, 20-21). Although scholars such as MacEachren would contest such statements, there is consensus regarding the intimate connections between power and maps; mapping efforts historically have helped construct desired rhetoric about contested geographies, affecting our common understanding of these geographies. In effect, certain historical developments in mapping and maps tend to affect our reading of Africa, African cities, and popular settlements, and by extension, I would argue, affect the way in which we create new maps of such settlements.

The historic application of maps, and advances in the art of map making are closely connected to political ambitions. Harvey (1991) argues that the wilful choosing of some information over other information is a way of controlling spatial relations in society. Maps are in other words tools for the conquest, taming, planning, and (re)shaping of society through space. In a similar vein Harley (2001) argues that as much can be learned from a map’s omissions as from its inclusions. Exemplified by the surveying of Ireland by English proprietors in the 1800s, Harley notes that the exclusion of Irish cabins in the countryside was not just due to “a question of scale and of the topographical prominence of such houses,” but rather to “the religious tensions and class relations in the Irish countryside” (2001, 67). Harley calls this notion the silence of maps, a silence pronounced in e.g. John Rocque’s *A Plan of the Cities of London and Westminster* (1775) which depicts “An idealized view of the city which emphasizes the gracious rurality of the main square,” while failing to convey that the districts around Broad St and St Giles “were rapidly becoming slums” (2001, 69).



Figure 1.5 Screenshot from *Google Maps*, April 2013, of Kibera, Nairobi.

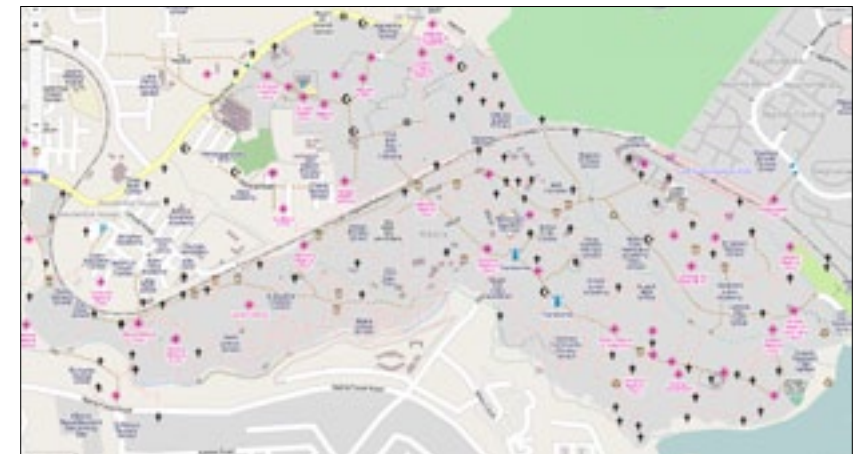


Figure 1.6 Screenshot from *OpenStreetMap*, April 2013. Same area as above, but more information heavy than *Google Maps*.

In any official maps of Nairobi purchasable in bookshops across the city, there is no reference to the informal settlements of e.g. Kibera, Mathare, Pumwani, or Korogocho. Although the place names might be present, the areas are seemingly uninhabited without buildings or roads. Much like the blank spots on early maps of the African interior, informal settlements can be seen as a rendition of a *Terra Incognita*, the allure of which entices the intrepid traveller.<sup>3</sup>

<sup>3</sup> Accordingly, the number of local outfits providing slum tours of Kibera and Mathare are on the rise. See e.g. kiberatours.com, victoriasafaris.com, africanspicesafaris.com, Pamoja Tunaweza Single Mothers Group, etc.



Figure 1.7 Printscreen from *OpenStreetMap* of Kinyago, Pumwani, April 2013.



Figure 1.8 Printscreen from *Google Earth*, April 2013. Same area as above, but showing a different reality than what *OpenStreetMap* offers.

The 2013 Google map of Nairobi (Figure 1.5) fares a bit better than official paper-based maps in terms of rendering information about popular settlements such as Kibera. Some place names are provided and path networks are in place (wrongly depicted as roads in this example). Yet, as we shall see in Chapter Four, open source mapping platforms such as *openstreetmap.org* (exemplified in Figure 1.6 with their rendition of the Kibera) are proving to be much more information intensive in some popular settlements where local groups have organised to map their surroundings. Still, even with ‘grassroots’ mapping platforms such as *OpenStreetMap*, the majority of Nairobi’s popular settlements are depicted as vacant sites,

as in the case of Kinyago in Pumwani (Figure 1.7), home to thousands of inhabitants. *Google Earth* (version 7.0.3) may provide better indications of the density and infrastructure in the area (Figure 1.8). The recent addition of the travel guide visible at the bottom of the screenshot is perhaps indicative of *Google Earth*’s target audience, and conveys even more expressively the propositional nature of maps.

### Imperial ambitions

“Maps were used to legitimize the reality of conquest and empire,” says Harley. “As communicators of an imperial message, they have been used as an aggressive complement to the rhetoric (...) extolling the virtues of empire” (2001, 57-58). Mbodj points out how mapping and maps were used extensively by colonial powers in Africa “to assess the territorial scope of their authority, to legitimize their power, and to organize the exploitation of both human and natural resources” (2002, 50).

Woodward and Lewis see African societies as less victimised by European imperial ambitions than writers such as Harley and Mbodj. They hold that there are differences of European and African maps attributed to the cultural relativity of sign systems, geographical orientation, and intention. However, the social discourse function of maps is a shared feature between European and African mapmaking: “African maps are social constructions whose form, content, and meaning vary with the intentions of their makers”, and that European and African mapping alike were entrenched in traditions of “selection, omission, and positioning (...) influenced by the mapmaker’s desire to influence specific social and political situations” (1998, 48).

Woodward and Lewis also exemplify how African map making traditions were influenced by European presence: King Njoya (ca. 1875 – 1933), ruler of Bamum in Western Cameroon, undertook in 1912 a complete survey of his kingdom to establish “his claim to rule over territory that was contested before colonial rule and was now the subject of negotiation between France and Britain” (1998, 43). In addition to making the map a tool for external negotiations, it was also constructed for internal purposes. Njoya admired German maps of the area but “considered them of limited value for his own administrative needs, such as allocating land rights and resolving land disputes within Bamum” (1998, 42). As such, one could claim that maps were viewed as powerful tools across cultures. The desire to influence the social and political through maps, which according to many scholars is quintessential to mapping, is a common desire often decided over by the elites.

### The elitist project

Hewitt (2010) shows how the formation of the British Ordinance Survey in the late 18<sup>th</sup> century was not only a tool for nation building, national identity, and the consolidation of monarchical power. Knowledge about maps and cartography was also central to the rearing of Britain's social elite. Mapping efforts and the contents of maps were decided upon by landlords, academics, military officers, and nobility. "(T)he patrons of English geographical atlases were likely to have been drawn from these upper ranks of society, the landowning class at large. Such groups represented perhaps no more than five percent of the total population yet they exerted a political and cultural hegemony disproportionate to their numbers," says Harley (2001, 118).

Mbodj claims that increased specialisation and technological advances in mapping meant that those with economic wherewithal and technical training were able to utilise mapping and create maps. Those without the economic means or technical skills were and are increasingly removed from mapping efforts. With the Berlin Conference and the division of the African continent amongst European states, there was a demand for "effective occupation along with documented claims. As a consequence," Mbodj states, "maps became essential in public and diplomatic territorial disputes. The publication or use of certain maps could attest to a particular political viewpoint or claim. (...) The distinction between official and non-official ("working") maps became fundamental" (2002, 49-50). Mbodj further uses GIS as an example of how technological advancements have served to retain mapping as an essentially elitist project (2002, 52).

Other examples are cited of how technological advances that require specialised knowledge and tools restrict the dissemination of information to limited groups. Gurstein (2011) criticises digitally powered mapping efforts of available drinking water in popular settlements in Nairobi as being elitist because it requires people to subscribe to digital SMS feeds in order to stay 'in the loop'.

Both Gursetin and Mbodj's critiques invoke interesting discussions related to power and mapping which may need nuancing. In the low-tech end of the spectre of participatory mapping, journals such as e.g. *Participatory Learning and Action (PLA)* show how a variety of NGOs and researchers have worked for decades to disseminate knowledge about maps and mapping in low-income, low-education communities showing that in terms of data collection, analysis, and the design of maps (often of a technical nature), such participatory processes can be successful in initiating dialogue and cooperation with authorities<sup>4</sup>.

<sup>4</sup> See for instance *Participatory Learning and Action* 54, April 2006. Earthprint Limited, Hertfordshire.

Though technologies such as *remote sensing*, often used for mapping urban settlements, certainly are out of reach for ordinary people for financial and technical reasons, online resources provided by e.g. Google are commonly accessible, also in Africa. Where Google's maps are readymade and unalterable by the public, online open source resources such as *openstreetmap.org* allow for 'anyone' to add or alter data 'wiki-style'. This requires the ability to operate a computer, which in most African contexts invariably brings us back to the elitist argument (although with the proliferation of computer training, use of smart phones and tablets, this is changing). In Chapter Four I will look more closely at locally based, participatory mapping efforts done using *OpenStreetMap* in Kibera, Nairobi where questions regarding elitism will be raised. In line with Wood (1992), what the participatory mapping efforts in Kibera have understood is that "the interest the map serves can be yours", meaning that if you do not own the map (if the map isn't working for you), the map's contents – or its arguments – are working for someone else:

Freed from this burden of ... dissimulation ... the map will be able to assume its truest character, that of instrument for ... data processing, that of instrument for ... reasoning about quantitative information, that of instrument for ... persuasive argument. Freed from the tyranny of the eye (the map never was a vision of reality), the map can be returned to ... the hand (that makes it)... the mind (that reasons with it) ... the mouth (that speaks with it). Freed from a pretence of objectivity that reduced it to the passivity of observation, the map can be restored to the instrumentality of the body as a whole. Freed from being a thing to ... look at, it can become something ... you make. The map will be enabled to work ... for you, for us. (Wood 1992, 182-183)

Just who "you" and "us" are needs to be addressed in light of the elitist tendencies in mapping efforts considering the growing popularity of resident participation. Participation in mapping is, however, not a new concept.

### Participation then...

Early European explorers in Africa and the Americas used participatory mapping approaches extensively to cover uncharted territory. Local elites made use of their 'cartographic encounters' with European explorers. Short describes how European expansive interests in the Americas were helped by local Amerindian societies seeking short-term economic and political gains from their encounters with Europeans. European mappers were only able to venture into the interior Short argues, with the assistance and participation of Amerindian peoples willing to share spatial information (2009, 12-13).

Parallels between the mapping of territories and the exploitation of territories have been pointed out by Wolf (1982) who describes how relations between Europe and Amerindian peoples was not limited to cartography, but also extended to trade resulting in the near extinction of the beaver in parts of North America. Though the commercial beaver trade was European, Wolf argues that the extensive trapping of beavers was only made possible by local groups with intimate knowledge of the land. Utilising existing political structures and trade systems in Amerindian societies these groups gained economic and political power over other local groups.

Woodward and Lewis give examples of the same kinds of power relations in Africa showing through a series of examples the importance of African informants and participatory mapping processes for European maps of the continent. Methodically, European explorers would speak to well-travelled Africans, chart their renditions of territory on a map, and crosscheck the information with other sources (Woodward and Lewis 1998, 38).

### ... and now

Although there may be little semblance between the participatory processes taking place in popular settlements today and the participation of locals in colonial mapping projects, current participatory processes may need to be critically scrutinised in light of this particular heritage of mapping. There is a commonality in the fact that mapping efforts come short when facing an unknown geography, and that the issue is best resolved by bringing aboard local knowledge and imbuing this onto the map.

Participatory mapping processes are popular today. It is the view of many practitioners and policy makers alike<sup>5</sup> that participatory mapping in popular settlements are a) democratic processes where everyone gets their say, and b) that this ensures more truthful data to be collected. However, as exemplified in Chapters Three and Four, it is possible to question how participatory and egalitarian such processes are, and if these kinds of participatory mapping processes can be said to bring aboard more truthful data than conventional mapping exercises would. I also argue that just as with historical participation, today's participatory mapping exercises can prove to be beneficial to limited groups – external as well as internal to a community.

In cities like Nairobi, that have a history of nourishing social segregation, it is important to question who gets to decide what constitutes place. As mapping is intrinsic to such exercises the follow-up questions would be: *who* does the mapping? who is it that Wood refers as the “you” and “us”? Without

<sup>5</sup> E.g. The World Bank, the founders of openstreetmap.org, and a variety of mapping activists. See Chapter Four for more.

addressing such kinds of issues, Harvey warns, those “democratic and egalitarian system of community-based planning” who’s role it is to make sure “minorities and cultural diversities” do not “get swept under the rug” (1991, 76) might find themselves unable to take care of the needs of popular settlements and their residents.

### Political arguments

Rather than addressing such issues, we find that discussions of democracy in mapping and redeveloping popular settlements often are driven by political or moral concerns. If we return to the British Ordinance Survey we find historical examples of the moral obligations of the elite in helping those less fortunate. In the wake of the industrial revolution there was a dire need for mapping the British city slums as the “explosion in the size and density of the population of cities had made social concerns like poverty, disease and contagion, and sanitation unavoidably pertinent.” The Poor Law Commission was established in 1834, “partly to research the links between poverty and disease, and also to investigate sanitary conditions in the large urban centres that grew up around factories and mines.” Maps were thus commissioned in order to “reveal the presence of every existing tap, drain, sewer and water source” (Hewitt 2010, 294-295).

These developments, says Benevolo, were partly political as the upper classes were forced to take action out of self-interest: there was growing concern that disease could not be contained within the slums and would spread to wealthier areas (1980, 755). Some decades later, the same imperative drove authorities in Nairobi to exercise increased control over African and Asian urban developments. With several outbreaks of plague occurring in the city between 1901 and 1916, measures were taken for the zoning and segregation of Africans, Asians, and Europeans into separate residential areas (Nangulu-Ayuku 2000).

In Europe, the mappings of conditions in slums in the 1830s and 1840s, as well as actions taken to mitigate such developments, were used politically by both opposition and government. Benevolo gives examples mapping efforts carried out by oppositional groups (1980, 756) as a way of pointing out how the “liberal city (...) turned out to be incapable of exercising proper control over the urban and housing developments” (1980, 755). The era was politically tumultuous. After the 1848 Revolution in Paris the first European public health laws were passed in an attempt to better conditions (1980, 756).

In Nairobi, no such clear opposition existed. Still, as I will cover in more detail in Chapter Two, mapping exercises were later used to legitimise and create political consensus for new ways to consider African urbanites. In

the late 1930s onwards, mapping efforts argued for welfare, amenities, and catering for family living in African residential areas that up until this point were considered housing units for a temporary workforce. This came about as part of a political shift necessitated by the need for permanent, semi-skilled labour in the country.

### **Moral obligations?**

Engels recorded the growing concern regarding the public ignorance of the situation in slums in England in the 1830s, citing Rev. G. Alston that as “little was known at the West-end of the town of this most destitute parish as the wilds of Australia or the islands of the South Seas”, and that knowledge of the conditions of the working class need be obtained in order to alleviate the situation:

“...we must lift the latch of their doors, and find them at their scanty meal; we must see them when suffering from sickness and want of work” (Engels 1998, 25). But while Engels spoke of workers *rights*, the Rev. G. Alston spoke out of *moral obligation*.

The point is here not to liken the situation in popular settlements today with conditions in working class England in 1844. Rather, it is to liken 20<sup>th</sup> and 21<sup>st</sup> Century colonial as well as post-colonial calls for action against poverty with the rhetoric of the mid-eighteen hundreds. Easterly (2006, 19) exemplifies this by comparing the neo-liberal worldview of Jeffery Sachs in 2005 with those of utopianist Robert Owen in 1857. In terms of moral sentiments, today’s explanations of why and what for we need maps of popular settlements are sometimes eerily reminiscent of 19<sup>th</sup> Century Christian values. In part this morality dictates that there is hope for those living in popular settlements *if only they could develop in the right way*.

There exists a tendency in NGOs and agencies dealing with popular settlements to use models of historical linearity, where the ‘norm’ is that cities should develop along similar temporal axes, and that if some lag behind they should catch up (Massey 2005, 70). In Nairobi this is evident in the 1948 Nairobi Master Plan for Colonial Capital, which argues that since Nairobi had developed from a “tiny wayside halt on a railway line” to “become greater in size than many cities in the United Kingdom”, a plan was necessary that befitted the towns “mature role of a Colonial Capital” (Thornton White et al. 1948, forward). The idea of the success of linearity did not end with colonialism in Kenya. The 1973 Metropolitan Growth Strategy and the 2008 Nairobi Metro 2030 Vision both echo the 1948 plan with regards to its metropolitan, Western ideals, where e.g. the Nairobi Metro 2030 seeks to be “a World Class Metropolitan, First and Foremost in Africa and the World.” Such narratives, says Pieterse “(tend) to function on the basis of an assumption that modern, gleaming, skyscraper-filled cities, with adequate networked infrastructures in

place to support them, is the only and ineluctable way into the future” (2008, 108).

Scholars such as Simone (2004) and Pieterse (2008) question whether such ideals are compatible with the type of urban developments occurring in popular settlements. Recent mapping efforts in Lagos (Spuybroek 2001), as well as case studies carried out in Part II of this thesis are evidence of highly specific African forms of urbanisation happening first and foremost in the ‘informal sector’ and in popular settlements. Massey (2005) argues that such developments follow different trajectories than the global North/West, and that such developments need to be taken seriously, rather than being treated as anomalies. This has implications for mapping efforts in popular settlements, and is increasingly being picked up on through current trends of participatory mapping.

Participatory mapping, covered in Chapter Three, attempts to take the trajectories of popular settlements seriously by involving local residents in mapping exercises. Digital mapping efforts, covered in Chapter Four, takes this even further by not only being participatory, but by being social media platforms allowing for public discussions amongst residents regarding what trajectories their settlement may or should take. However, it may be that some of the core problematics of maps, such as the logic of categorisation, stands in the way of such mapping efforts reaching their fullest potential.

### **The categorical nature of maps**

As noted earlier, Harley talks of the silence of maps, pointing out that much can be learned about the intention (proposition) of the map from its omissions, i.e. what the map does not show (2001, 67-69). Black points out that omissions are also present in what is shown, in part through the categorical nature of maps (Black 1997, 104). Maps generalize data in categories, and present these categories visually, making them appear objective. However, these are visual categorisations, not truths.

MacEachren argues that categories in maps are problematic because cartographers “devise their typologies (and individual maps) within a sociocultural context.” This context, he says: “puts constraints on the potential categories that are considered appropriate to represent.” MacEachren attributes this problem to mappers being immersed in sociocultural contexts that inhibit them from evaluating their work from a distance (2004, 330-331). In the next chapter, evaluating historical mapping efforts in popular settlements in Nairobi, many of the examples – especially those carried out by colonial administrators before World War II – can be said to share this trait.

Black holds that problems associated with unrefined categories in part stems from the dissemination of powerful mapping software enabling non-experts (e.g. designers) to create maps in keeping with their own agendas. “But with little real interest in maps or knowledge about them (...) they are often unaware of the lacunae in, and the problems of depicting, their data” (1997, 104-105). Indeed, few of the examples of mapping efforts covered in Part I of this thesis are done by people with professional cartographic experience. Although not software based, some of the participatory mapping exercises exemplified in Chapter Three demonstrate a lack of ability on the part of facilitators to understand why and when certain mapping tools and exercises are appropriate. Broad generalisations and omissions occur as a result.

Not only does the categorical nature of maps create problems in terms of generalisation and omissions. Categories also result in a “general failure of maps to communicate uncertainty.” (Black 1997, 104) This is a key issue when dealing with popular urban settlements that are, to the outside, filled with uncertainties. In Chapter Four, examples of digitally based, participation-driven mapping efforts might currently be addressing such problems because the digital platforms not only allow for – but also require – constant updates and revisions. ‘Uncertainty’ is thus under constant scrutiny from a large group of mappers all able to make amendments to the map. However, the exemplified digital platform still utilises categorical definitions of roads, trails, and other infrastructure, leading to possible continuing problems related to categories and representation.

### **Differences between academically based and consultancy-based mapping efforts**

Through the examples of mapping efforts shown in this thesis, a number of differences between academically based and consultancy or government based mapping efforts are made clear. These will be covered in more detail in the following chapters. Generally there exists a gap between academically produced mapping efforts by research institutions or universities that are meant as academic and critical exercises. They are not to be literally applied. Mapping efforts executed by government, consultancies, or aid agencies, however, are intended as blueprints for interventions. Closing the gap between non-interventionist academic mapping efforts (that often hold key analytical insight) and expedient consultancy-based mapping efforts (that provide the basis for intervention) might be seen a key challenge for the urban development sector.

In Nairobi for instance, substantial amounts of analytic and deeper-prodding mapping efforts that added to the knowledgebase about popular settlements were carried out in the 1960s and 1970s. Little was done in terms of acting on this production of knowledge by planning authorities. In part this can be

attributed to the ideological gap between an academic focus that was for the most part positively inclined in its outlook on popular settlements, in contrast to the authorities that rather focused on building new housing schemes as an antidote to the remnants of colonial exploitation that popular settlements represented to some politicians<sup>6</sup>. Lack of action can also be attributed to academically produced knowledge in general being hard to ‘translate’ into feasible plans. In other words, the lack of operational focus in mapping efforts carried out by academics during the 1960s and the 1970s meant that few of the urban redevelopment plans devised by authorities included any academic findings at the time. By contrast, despite their comparative lack of analysis, government produced mapping efforts focused on operational recommendations, and could therefore be used as a basis for redevelopment plans (e.g. Farnworth 1964, and Mbogua 1965).

Some attempts have been made to bridge the gap between observation and analysis on the one side and suggestions for action on the other, notably Etherton’s *Mathare Valley: a case study of uncontrolled settlement in Nairobi* (1971) and Moser’s *Ordinary Families Extraordinary Lives* (2009), a research based in Ecuador, but included in this study by virtue of its methodological approach.

In general it could be said that academically mapping efforts carried out by architecture and urbanism institutions tend to be better at bridging the gap between observation and action than academic work produced by the social sciences or humanities. However, because of the practice-oriented nature of these fields, many such mapping efforts tend to take on qualities of consultancy reports rather than being of an academic nature.

I will seek to address this challenge in the mapping method described in Part II of this thesis.

### **The reification of now (time)**

Many of the mapping examples in this thesis tend to describe only the current state of affairs in popular settlements. There is a tendency to make ‘freeze frame’ observations without connections to the past. As noted in Chapter Seven, some mapping efforts attempt a partial recapping of historical events, often in the form of timelines that, despite their usefulness in an overview, hold little in the way of analysis. Current events are rarely grounded in these timelines. Other examples include generalised, potted histories that provide a

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<sup>6</sup> See e.g. Chapter Two for the public address made by the mayor of Nairobi in 1969 during the opening of the Pumwani Redevelopment Scheme Phase I.

sense of context, but much like the timeline histories provide little in the way of analysis.

Only a few mapping examples covered in this thesis (notably academic work from the 1970s) attempt to ground their mapping efforts in historical events and make connections between past and present developments. For instance, in *Pumwani: the Politics of Property* (1972) Janet Bujra examines the historically different socio-economic and culturally different backgrounds of people in a popular settlement in Nairobi in order to highlight (then) current class differences.

Other academic works also prove the value of thematic historical research. Some of these presented in this thesis are Louise White, who historically examines prostitution in Nairobi in *The Comforts of Home* (1990) in order to better understand the role of prostitutes in the city. Also, Claire Robertson historically examines women and trade in Nairobi in *Trouble Showed the Way* (1998) in order to understand better the socio-economic role of women in popular settlements in the city.

Arguably, none of this research would have gained insight into current issues without conducting in-depth, thematic historical investigations.

But also a more broad reaching historical perspective on the city can be highly valuable to researchers seeking to explain processes of urbanisation. Since the 1960s a number of authors have been pivotal to explaining the growth of African cities and urban societies. John Lonsdale, Andrew Burton, James Brennan, David Freund, Richard Harris, John Iliffe, Terrence Ranger, David Anderson, and John Hutton all have extensive authorships and critical analysis providing valuable historical perspectives on current urban developments.

In current mapping exercises in popular settlements carried out by development agencies or NGOs, such analytical insight is rarely cited. There is, I would argue, potential in allowing for more interdisciplinary sharing of research and data between those engaged in explaining historical urbanisation processes and those mapping current urban developments.

In addition, as I will try to show in Part II and III of this thesis, if mapping efforts are to cater to strategic interventions (that lie ahead in time), a mapping of histories as well as current events enables planners to more precisely suggest development trajectories, i.e. the future state of affairs.

The mapping example covered in Part II opens up for discussions relating to the mapping of historical events and attempts to show the importance of such a mapping for better understanding the current situation in a popular settlement – as well as envision future developments.

### **The uniformity of a community (scale)**

Any apparently homogenous territorial space is problematized if attention is devoted to its internal differences. (Black 1997, 59)

Time is not the only issue of concern. Issues of scale are also important. Popular settlements do not exist in a vacuum. Nonetheless, many mapping efforts tend to limit the scope of investigation to the geographical or political boundaries of the settlement they are mapping, effectively severing the multiple connections that exist between the settlement and the rest of the city, be it other settlements, shopping districts, markets, or infrastructure that are of importance to activities in settlements. Similarly, a limited scope of mapping undermines the importance of a community's connections to the rest of the country and region; family ties, trade relations, and rural-urban migration.

In the mapping example in Part II of this thesis, Gikomba market provides one such connection of vital importance to Pumwani. From Gikomba, social and economic links are made to most of Nairobi (especially shopping streets and malls), to the rest of Kenya (especially areas with agricultural production), to the region (especially the ports of Mombasa and Dar es Salaam, but also to Uganda and DRC), and to further afield (e.g. the Middle East). In order to better understand the dynamics of trade in Pumwani, these connections and their implications need to be mapped.

Deciding where to draw the boundary is a problem in any form of social description. Maps, because visual, will appear to make such drawn boundaries stronger. Examples from planning history show how some maps drawn in some schools of thought, such as New Urbanism, will tend to end abruptly while other schools of thought provide a continuation of road lines, colours, and shading in order to provide a sense of an on-going continuity.

The depiction of communities as uniform through maps is not only confined to geographic issues. It also relates to the social. There is a tendency in many of the sources used in this thesis to compress residents in popular settlements into a single group – the urban poor. Large institutions such as UN-HABITAT (e.g. da Cruz et al. 2006) and the World Bank (e.g. 2009, 116-120), as well as smaller organisations such as Slum/Shack Dwellers International and Pamoja Trust (Makau et al. 2009) all do this. When groups are distinguished from the rest of the settlement it is often along lines of e.g. gender or age groups. In Nairobi academics have had a tendency to focus on distinctions between sections of the city, where the more affluent North and Western sections of the city are set in contrast to the impoverished South and Eastern sections (e.g. Nevanlinna 1994). With these division lines there

is a tendency to overly focus on Nairobi's colonial heritage, and forget the complex social build up internally in popular settlements throughout Nairobi that e.g. Bujra (1972) uncovers in her analysis of class relations in Pumwani.

The mapping example provided in Part II of this thesis supports Bujra's research: that in Pumwani, differences between social groups have been, and still are of great importance, and that many of the issues brought to the fore in the mapping are only possible to detect and explain if attuned to the social differences in the settlement.

### **A lack of visual representation?**

In the material reviewed in this thesis visual material is used to a varying degree. This is true for both historical and current mapping efforts, and academic as well as consultancy or government produced work. There seem to be a number of reasons why mapping efforts vary in their use of visuals.

Mbodj relates the lack of visual material to the historic necessities of 'specialisation' and 'professionalization' of map making as the African continent was divided amongst European powers and occupied, claiming that: "Colors and illustrations disappeared in favour of more numerical and statistical data" (2002, 50). Based on the examples from Nairobi covered in the next chapters, however, it seems these tendencies shift periodically. With a few exceptions, Mbodj's posit is true for early periods of mapping in Nairobi, but after independence, as exemplified below, more qualitative approaches to mapping, donned with visual material, started appearing. In the 1980s, however, text-based, numerical and statistical mappings reappeared.

The radial category of mapping as described by MacEachren (2004) opens for text as a legitimate form of mapping, and as such the lack of visual material is not problematic. However, visuals can often prove useful aids in both analysis and presentation of data. In addition, a visually based approach to mapping can prove to be instructive for the entire mapping process. In Part II of this thesis I further examine how various visual representations could be helpful to analysing socio-economic and physical categories in popular settlements.

Today, digital possibilities and printing possibilities have made it easier to use visual material. Reports from UN-HABITAT (e.g. *State of the African Cities 2010* and *Korogocho Situation Analysis*, 2010) are often high-colour glossy publications that are graph and image intensive. Current digital mapping efforts are also highly visual, with platforms where maps, satellite imagery, and geographical information often take priority over text-based information (Kurgan 2013, 30).

But it is not only digital mapping efforts that rely on visuals. The intent of some mapping efforts would have been hard to realize without a visual approach to mapping. A variety of examples from Nairobi, both historical and current, testify to this.

Ogilvie's *The Housing of Africans in the Urban Areas of Kenya* (1946), reviewed in Chapter Two, uses photos and plans to map the positive contributions of government constructed social housing schemes. Photos of quaint, cottage-style houses with lush green surroundings in the new developments are contrasted with photos from the old settlements of muddy, densely built streetscapes (like a visual comparative of 'before' and 'after'). Detailed floor plans of new houses with supporting texts suggest how to utilise indoor spaces. The plans are can be seen as a compelling visual aid for "those concerned with the housing of Africans" (1946, 63), suggesting for them how to construct "fair" housing (1946, foreword).

Etherton's *Mathare Valley – a case study of uncontrolled settlement in Nairobi* (1971), uses maps and diagrams to discuss the logic of uncontrolled spatial developments in Mathare. The juxtaposition of a number of maps, aerial photographs, diagrams, statistics, and descriptive texts analyses spatial developments (see Chapter Two for an example page). Through selective maps and diagrams a visual 'order' is made clear, underpinning the argument that what is seen as 'uncontrolled' by authorities and outsiders, does indeed have a logic and is controlled from inside the settlement.

In Architecture Sans Frontières' *Change for Design* (2011), images, drawings, collages, and maps are integral to the investigation of both place and social conditions. Using a breadth of visual tools becomes a method for eliciting topics that need to be addressed in the settlement.

Moving into the digital domain, in the case of *Map Kibera* (started 2009), the production of the map, and the process of mapping, attests to the existence and diversity of Kibera, a popular settlement in Nairobi. As described in more detail in Chapter Four, the map is overlaid with news, posted by a group of volunteers on the basis of SMS messages and other forms of communication from local residents. In addition news feeds can be commented on in a public online forum. The community comes 'alive' through the map and its constantly changing information. Arguably, the visualisation of news and discussions on a map makes the presence of the community and its various residents more tangible. In a more serious-minded way than Monmonier's aforementioned tongue-in-cheek comment about drawing maps (1996, 88) the digital map/news combo solidifies claims of the legitimacy of the settlement.



### Digitalisation and the de-expertising of mapping

The digital domain is increasingly expanding analytical and presentational possibilities in visual layering, temporal adjustments, ease of adding and subtracting. This makes digital mapping platforms powerful tools, where ease of use opens up for a ‘de-expertising’ of mapping. As I will return to in Chapter Four, academics argue over the implications of such a shift.

Some authors, such as Wood (1992), welcome such a shift, believing that it will allow the power of maps to better serve the common interest. Other authors, such as Monmonier (1996), Black (2000), and MacEachren (2004) question non-experts ability to wield such powerful tools. They argue that quality and clarity might suffer if discussions regarding interpretation of data (what goes into a map) and the representation of data (how things are to be drawn on a map) are not kept at a professional level.

This discussion connects with two related strands of mapping in this thesis: non-digital participatory mapping in popular settlements, discussed in Chapter Three, and; digital social media based mapping in popular settlements discussed in Chapter Four.

In these contexts the academic discussion above is arguably a potent one. Given the traditional marginalisation of such communities, the power-shift afforded by an opening up and de-expertising of mapping is a possibility for residents that should not be taken lightly.

Because de-expertising and digitalisation often are connected, the ‘power-shift discussion’ is only implicitly covered in the case of non-digital participatory mapping. Here, academic discussion rather focuses on what the mapping exercise itself gains from local participation, or what local participants can achieve, rather than discussing what it means for mapping to have non-expert mappers. In some cases, discussed in Chapter Three as *extreme participatory mapping*, the discussion is taken as far as to claim that *only* participatory knowledge can produce plausible maps of popular settlements, and that any ‘expert’ interference might contaminate results. The meaning of Wood’s claim is thus taken to its furthest extreme.

With the advent of digital mapping platforms such as *openstreetmap.org*, used in several popular settlements in Nairobi, the ‘power-shift discussion’ is more commonly discussed in relation to digital mapping efforts, in Nairobi notably in the popular settlements of Kibera and Mathare Valley.

Based on examples from these mapping efforts, a number of challenges arise that I attempt to address in Chapter Four. These relate to technical and communicative issues, such as providing categories that may better capture the specificities of a settlement, and dissemination of a digital mapping

source to a population that may have access to digital tools, but have little interest in using them. Challenges also relate to social and political issues, such as questioning how local digital mapping efforts are, how democratic they are, and how they reflect community needs (relating back to Wood’s de-expertised map serving the common interest).

As I will explain in Chapter Four, I have in this thesis opted not to base my own mapping method on a digitally based platform due to the limitations that the above issues pose for digital mapping. It is clear that the digital domain provides some powerful methods for mapping, and that the work carried out by open-source, and social media based mapping platforms in popular settlements is highly important. But given the current status of digital mapping, I believe that more attention has to be paid to the theory and methods behind such tools. I would argue that addressing these issues is best be done by probing their non-digital baselines. The mapping method constructed in Part II of this thesis is therefore ‘analogue’.

### Approaches, methods, techniques, and tools

Throughout this thesis I will refer to mapping efforts as being either approaches, methods, techniques, or tools. I do this intentionally because I would argue that mapping by its very nature comprises all of these definitions, and is often hard to pin down as being one or the other. It depends on the context of the map; the mapper, what is being mapped, and the intent and outcome of the mapping.

In this thesis, when I refer to mapping techniques or tools, I generally mean implementation of single, ‘stand-alone’ mapping efforts, often resulting in a single, specific kind of map. I often use the terms tools and techniques when addressing the technical aspects of mapping, such as seasonal calendar mapping, where residents in popular settlements are asked to map or diagram seasonal changes in their use of their neighbourhoods. Another example of a technique is transect mapping, where residents will walk through their neighbourhoods, choosing a route of importance to them. The section of this transect will be drawn up and used as a basis for discussions.

When I refer to mapping approaches or methods, I refer to something more overarching, a way of understanding and piecing together mapping tools into a coherent product, attuned to theoretical understandings of what, why, and how to map.

While transect mapping can be seen as a mapping technique or tool, It can also be utilised as a method for gathering knowledge, where the transect is a

vehicle for interviewing people and analysing places along the walk. Whether it is a tool or a method depends on the context in which it is being used.

## CONCLUSION

Maps can never fully retell the complexity and depth of real life. Nor should they. Maps and diagrams need to abstract, or simplify our surroundings in order for us to make some sense of them (Owen 2002). In other words, mapping tools are spatio-temporal abstractions of reality. By this we mean that they are spatial representations of a frozen moment of time – or rather – an idealised moment in time, a double abstraction.

In these abstractions lie copious amounts of power, used throughout history for purposes of conquest and social control of physical environments (Harvey 1991). However, if mapping tools are as closely connected to conquest and social control of physical environments, as Harvey points out, is it at all possible through such tools to better represent the multiplicity, ‘the others’, and marginalised peoples’ realities? And how close do we need to get to gain insight? What is private – and what is public information? Such moral implications can be important to address when mapping popular settlements, partially because the approaches used to illicit information from local residents often crosses the line of what is private and public information. Survey questionnaires, such as the ones covered in Chapter Three, will e.g. ask about bed spaces, who shares which rooms, how income is generated, and how much income is generated, how many meals children in the household get, how often they have access to water, how often they visit clinics, literacy, whether there is trouble with alcohol or substance abuse, domestic violence, etc. Such questionnaires are naturally anonymous, but tabs are kept in other ways: with advances in digital mapping, surveyed households are easily geotagged and posted on online maps; numerous photos are taken to document the mapping process, and also posted online. The increasing use of digital mapping efforts and the ease of which such information is disseminated through social media based platforms opens up to a level of visibility and information richness that sometimes crosses over the divide between public and private information.

But the impetus for extracting information from popular settlements is understandable. These are areas that often break with the logic of the ‘city proper’, that come across as areas brimming with uncertainty, and where common mapping tools, with their categorical and absolute mapping schemata may fail to provide comprehension. Other ways of eliciting, analysing, and displaying data may be necessary.

In this introduction I have highlighted selected issues central to historical mapping that may be of importance when discussing popular settlements today. I have attempted to shed light on the following; that maps and mapmaking were intrinsic to imperial expansion – also in Africa; that mapping – in the Western tradition – became professionalised with growing national and imperial ambitions in the sense that it was governed by the elite; how it can be argued that mapping thus has effectively been moved away from the public but that, at the same time, there is ample evidence to suggest that imperial endeavours in unknown territories often only succeeded with the assistance and mapping knowledge of local groups; how the elite of local societies utilised these affiliations to reap short term political and economic benefits, making an argument for maps being viewed as powerful tools across cultures; and how mapping efforts in poor urban settlements have historically as well as currently in part been driven by moralistic arguments.

I also point at a number of current issues important to this thesis. That mapping in the classical academic vein is often less ‘operational’ than mapping efforts carried out by consultancies, but can often plough deeper in its analytical efforts; that historical analysis can be highly valuable when used to a purpose in mapping; that mapping exercises in popular settlements tend to disregard internal diversity between resident groups; that visual representation can be an important part of mapping methods, despite many mappings – as defined by MacEachren (2004) – being text-based; and finally that digitalisation and the ‘opening up’ of mapping to non-experts are issues that hold great potential, but are not without pitfalls.

What I have also tried to make clear in this chapter is that there exists a large body of academic literature critically examining mapping, and a substantial body of academic literature focusing on popular settlements. Within these focal areas are several schools of thought, and although mapping techniques (in a broad sense) are used actively in some of the literature on popular settlements, there are few works that exclusively bring the two together, or more precisely: few works look critically at the practice of mapping social attributes, variables and relationships in popular settlements from the mapping-point-of-view. In this chapter I have looked at some of these schools of thought and how they might be brought together to critically examining the use of mapping of popular settlements. In the next chapter I will turn to the application of mapping efforts in popular settlements in Nairobi starting in the early 1900s to look at how mapping efforts were used to explain conditions and suggest future developments in settlements.

## 2. Historical mapping approaches

HISTORICAL MAPPING APPROACHES IN NAIROBI 1910s – 1990s

### **Introduction**

The history of information gathered on popular settlements in Nairobi through mapping efforts by NGOs and governmental bodies runs parallel with the history of urban developments in Nairobi. This connection can be traced back to the early beginnings of Nairobi at the turn of the 19th Century, and continues up until today. Mapping efforts have been central to the urban development work geared towards solving issues of urban poverty and ‘slums’. Urban developments in Nairobi – and by extension mapping efforts – tend to be periodical, shifting between ideals for how to better conditions for residents in so called informal settlements and slums and more lofty aspirations of city building. Still, every period has a perceived core focus on how to best control developments in popular settlements and create stability for economic developments.

Through a series of examples of mapping efforts this chapter provides insight into the historical role of mapping in popular settlements in Nairobi. In which way is information about popular settlements gathered through these mapping efforts, and what kind of information is brought to the fore? To answer this we must first examine mapping efforts in relationship to the history of urban development in Nairobi and the specific context in which the mapping efforts were carried out. This historical review is divided into five periods. The examples of mapping efforts reviewed in this chapter are those I consider to be typical and essential for each period. As such, the examples, be they reports, recommendations, brochures, studies, or thesis work, make up a comprehensive though not exhaustive list.

My intent in this chapter is to show the close link between mapping efforts in popular settlements and policies guiding urban development in Nairobi. Based on examples in this and following chapters, I argue that mapping efforts cannot be assessed if removed from the period in which they were created. This chapter shows that this has been true throughout the entirety of Nairobi’s existence, and based on examples in the following chapters, this is also true of current mapping efforts.

Based on the definition of mapping provided in Chapter One, by *mapping efforts* I mean any data collected by academic institutions, NGOs, or government agencies through observations, surveys, map making, statistical data collection, and the analysis of this data. Many of the examples of mapping efforts gleaned to in this chapter are text-based documents, often with numbers and statistics in their data collection and analysis, such as in the *Vasey Report* from 1953. Other mapping efforts, like Etherton's study of Mathare from 1971, are more visual, where maps, diagrams, and images are important parts of the data collection and analysis. On a general level one could say that early mapping efforts from the 1910s onwards to the 1940s contained little visual materials, and that later mapping efforts from the 1950s increasingly used visual materials as a part of their argumentation. There are, however, other nuances, such as professional backgrounds, that affect visual or non-visual approaches to mapping. For instance, mapping efforts by academics in the social sciences in the 1970s hold little visual material. Mapping efforts done by architects in the same period are visually rich.

By *urban development* I mean aid-related development in an urban context. The term is commonly used to refer to the development sector's work on issues common to cities in the South such as urban poverty, overpopulation, lack of housing and shelter, substandard infrastructure, security and health measures etc. (e.g. Pieterse 2008).

### Outline of chapter

Due to the close link between housing policies, upgrade schemes, and the mapping efforts carried out in popular settlements in Nairobi, a periodization of mapping can be a useful way in which to structure this chapter. Five periods can be clearly identified. These are; the formative era and initial official housing period from the early 1900s up until 1939; then a period marked by increasing concern with social issues between 1939 and 1963; a social housing period between 1963 up until the late 1970s; and the structural adjustment period from the late 1970s to the early 1990s. The final period from the early 1990s up until today, a period marked by upgrading and a reinvigorated focus on social concerns, will be dealt with in a chapter of its own. The periods are not absolute in terms of dates, and transitional phases would naturally occur between periods. Nonetheless, a periodization like this is helpful because it makes clear the changing nature of mapping and data collection in popular settlements in Nairobi over time, and how this may connect to changes in policies and social issues.

Each section will look at the approach to mapping in context of the period in which they were created: their goals, their data collection, and their analysis, framed in relation to the policies guiding urban development issues

in Nairobi at the time. Where applicable I will briefly touch upon issues pertaining to the history of mapping where maps and mapmaking often function to underpin policies, and examine the correlation between mapping efforts and urban development in Nairobi. This periodization takes its queue from Harley (2001) who examines mapping efforts in light of context: the context of the mapmaker, the context of other maps at the time, and the social context in which the map is produced.

Many of the mapping examples gathered in this overview relate specifically to Pumwani, the first official African location in Nairobi, an area that has, because of its size, densities, and historical longevity has been the focus of several mappings and reports during the course of the 20<sup>th</sup> Century.

### A REVIEW OF FOUR PERIODS

#### Early 1910s – 1939

Spanning three decades, this initial period of mapping in Nairobi may seem extensive. The city grew and changed tremendously during this time. However, mapping efforts in popular settlements and the colonial stance on Africans living in Nairobi did not change markedly during these years. Only around 1939 is there a palpable shift in the way data from popular settlements is collected and analysed. Up until this most, if not all material produced on the African urban communities in Nairobi revolves around issues of control and containment. This is mainly done by the use of quantitative data where African populations were counted and categorised. The main concern on the part of the authorities was whether to try to make order out of a completely new, and seemingly random and chaotic entity – African urbanity; or to leave such developments be, based on the argument that such developments were not to be a part of Nairobi.

From this period examples of mapping efforts and reports on conditions in Nairobi are: J. Simpson's *Report on Sanitary Matters in the East African Protectorate, Uganda and Zanzibar* of 1913, The Feetham Report of 1927<sup>1</sup>, a memo by D. O. Brumage, and E.B. Hosking: *Memorandum of the native locations of Nairobi*, including a number of other memos, annual reports, and minutes from the Nairobi Municipal Council<sup>2</sup>.

Methodologically speaking these mappings rely on two things that both connect with Mbodj's (2002, 50) critique of the growing professionalization of colonial map making, discussed in Chapter One. These are 1) the use

1 Report of the local Government Commission, 1927, Vol. 1 Nairobi and its Environs.

2 See Parker 1949, Hake 1977 or McVicar 1969 for a more thorough review of Municipal sources on these matters. Brumage and Hoskins' reports are from between late 1920s and early 1930s.

of quantitative data: collections of numbers and statistics from African settlements in and around the city indicative of some developments and trends, and 2) the increasing professionalization of mapping and the analytical skills of the authors, who were well-seasoned colonial administrators. As administrators they were intimately connected to the political developments in Kenya. Coupled with their life-experiences and their technical training, this influenced the analysis of data collected in the mapping exercises. Professor William J. Simpson was a medical expert brought in from England to survey sanitary conditions in East Africa.<sup>3</sup> Justice R. Feetham was a judge in Transvaal in the Union of South Africa and a former Town Clerk of Johannesburg.<sup>4</sup> Douglas Oliver Brumage was the first appointed Municipal Native Affairs Officer in Nairobi in 1928, followed by E. B. Hosking in 1930-38. Both men were in the Civil Service for long parts of their careers.<sup>5</sup> Most of the mapping efforts carried out in the period were commissioned by the medical health authorities and native affairs authorities in Nairobi. Arguments in the reports centred on issues of health and sanitation, procuring extensive quantitative mappings of houses, people, toilet facilities, etc. Focussing on health and sanitation was important given the numerous outbreaks of plague and disease throughout the period. The mapping of insalubrious conditions was however used to pave the way for arguments for zoning and racial segregation to stem the spread of disease. After studying and mapping “Urban Problems”, Simpson concluded in 1913 that it was “in the interest of each community and of the healthiness of the locality and the country”, to “provide well-defined and separate quarters for European, Asiatic and African...”. According to Simpson the differences in standards, mode of life, and customs between Europeans, Asians, and Africans necessitated segregation (McVicar 1969, 53).

The subcommittee that were to review Simpson’s mapping and recommendation agreed to the need for implementing segregation measures on the basis that it was “definitely accepted as an axiom in the planning and laying out of all towns in the tropics that European population should be segregated from the natives”.<sup>6</sup>

3 William John Ritchie Simpson held an M.D. and a Diploma in Public Health and was a fellow of the Royal College of Physicians. He was a professor of hygiene at King’s College University of London, and a lecturer in tropical hygiene at the London School of Tropical Medicine. He was also sent to West Africa and completed a report from his journey in 1908. (The International Journal of African Studies, Vol. 25 No. 2 1992, p 337, Spencer H. Brown: Public Health in Lagos, 1850-1900.)

4 Hake 1977, 26 and 256.

5 From *Kenya Gazette* (1928-38)

6 From *First Report by the Sub-Committee on the Simpson Scheme, Nairobi, April, 1915* (in McVicar 1969, 20).

Indeed, such sentiments did not only occur in Nairobi, but prevailed throughout East Africa, e.g. in Dar es Salaam where mapping efforts used health and sanitation to underpin the need to segregate between orderly, well kept areas and other areas where building codes and standards were less strict (Brennan and Burton 2007, 119). In other words, authorities did not explicitly express that divisions were to be based on racial distinctions. Rather, racial segregation became an implicit result of health and sanitation measures. It can be argued that because the zoning of cities such as Nairobi and Dar es Salaam was more connected to infrastructural and economic distinctions rather than racial ones, these colonial cities were from early on distinctly class based societies where class and race often coincided. Social divisions were constantly returned to in later mapping efforts where economic arguments played an increasingly important role.

It is possible to make a distinction within the period between mapping and policies carried out up to the early 1920s and mappings and policies carried out in the late 1920s and 1930s. The period between 1898 to the mid 1920s was characterised by the establishment and growth of African communities – mostly on their own accord – in and around Nairobi. After the mid 1920s authorities took a more active role in catering for the establishments of such communities.

Throughout the period the official stance was divided on the issue of African urban settlements. Before the mid 1920s focus was however on investigating the possible ramifications of such settlements on the rest of the city. To reiterate, problems related to sanitation, health, and crime were used to segregate between the city ‘proper’ and the African urban settlements.

Looking back at this period we can clearly see the historical, colonial socio-cultural contexts that these maps and mapping ventures spring out of. As noted in Chapter One, MacEachren sees this as inhibiting mappers from evaluating their work from a distance (2004, 330-331). I would add, that because the recommendations provided by these mapping efforts correspond so closely with prevailing colonial policies, mapping efforts that ‘evaluated their work from a distance’ would have been unhelpful to the administration.

The close coordination between mapping and policy became apparent during the 1920s. At this time the official discussions with relation to African urban settlements changed as the authorities had come to the conclusion that the settlements were “likely to remain” (McVicar 1969, 36). Questions regarding urban African communities thus changed to focus on how to best control such locations – and the extent of such control. Mapping efforts were actively used to underpin these changes in official policies. The thematic of the mapping efforts, with their focus on sanitation and security, and the methodology

of the mapping efforts with their focus on numbers and statistics did not change during the course of the period. However, the conclusions and recommendations made on the basis of the mapping efforts did. This change in the use of mappings, and the recommendations that came out of such mappings, need to be seen in relation to the political acknowledgement of 1) the ever present need for an African labour force, and 2) the utility of allowing this labour force to reside in the city.

Authorities and employers started constructing housing for the city's African work force. Pumwani, the first official African housing area, was established on the northern banks of the Nairobi River by 1922<sup>7</sup>. In 1930 a bill concerning the condition African urban settlements was introduced "to provide improved conditions (...) and better administration" in such areas. To back up the claims and recommendations in the bill, the Municipal Native Affairs Officer, D. Brumage, carried out observations in Pumwani and Pangani. He established that conditions in Pumwani were "unsatisfactory to a degree", but that it was in Pangani that conditions were most severe<sup>8</sup>. While Pumwani was a planned location (gridded), Pangani was unplanned. Based on these observations Brumage concluded that: "the layout of the village and hostels should be in the 'grid-iron' scheme", that allowed for "efficient management by the Sanitary, Police and other services" (McVicar 1969, 36). Mappings of issues related to health and crime – that were earlier used to argue for separation of people and services – were now used to argue for a more controlled development of African neighbourhoods.

### 1939 – 1963

1939 to 1963 was a period characterised by increasing political pressure from England concerning welfare issues. In Nairobi this shift merged with a growing focus on adequate housing for the African workforce. Two concerns were paramount throughout this period: the provision of *enough housing* in a city with a chronic shortage of dwellings for Africans, and the provision of *family housing* in a city that had previously only catered for a dominantly male, transient workforce. Welfare issues coupled with more specialised and competitive industrial production paved the way for a change in rhetoric from Government as well as private enterprise: if Kenyan producers were to be competitive, African workers needed to be skilled and permanent. Welfare measures, amenities, adequate family housing, and skills training

7 Pumwani had been planned as a location for many years, but not until 1921 did plans get the proper political backing. The first residents moved in in 1922. For more on the establishment of Pumwani, see Chapter Seven.

8 Based on memo by D. Brumage, quoted in McVicar 1969, 36-38.

would ensure a complacent and productive workforce (see e.g. Lewis 2000, Robertson 1998).

Mappings and reports from this period generally mirror these sentiments. In 1939 Municipal Affairs Officer E. R. St. A. Davies carried out a census of the African population in Nairobi, showing that African males were overrepresented in the African locations. Davies' report follows the logic of the previous period of relying on quantitative data and the analytical efforts of a seasoned administrator<sup>9</sup>. Politically, however Davies' report together with a number of other reports<sup>10</sup> were used to initiate a new period in African settlement issues in Nairobi. The material presented in these reports was used in on-going discussions in Government at the time that argued for allowing African families to settle in (or around) the city. A bill was introduced to set up a Central Housing Board, and plans for new African housing areas (Ziwani, Starehe, and Kaloleni) were drawn up in the early 1940s, and building commenced from 1942.

After the war, the scope of the studies, the focus of the data collection, and the analyses all helped build consensus on the above issues. I have chosen to focus on the following reports and mappings from this period: G.C.W. Ogilvie's *The Housing of Africans in the Urban Areas in Kenya* (1946), M. Parker's *Political and Social Aspects of the Development of Municipal Government in Kenya with Special Reference to Nairobi* (1948), and E.A. Vasey's *Report on African Housing in Townships and Trading Centres* (1953). These mapping efforts share commonalities with mappings carried out in the previous period, as these too rely heavily on the analytical skills of professional and highly experienced administrators. As in the previous period these administrators (e.g. Ogilvie and Vasey) are on the outside looking in: it is their outside view of conditions that come to the fore. Some tendencies towards multiple points of view are present in the period (in e.g. Parker), where interviews with local residents are presented. This is in many ways a forerunner to the period after 1963.

Compared to the period between 1910 and 1939 mapping efforts between 1939 and 1963 changed in other ways: there was less reliance on quantitative data as the only source of material, arguably because the size and growing complexity of African settlement in Nairobi at the time increasingly provided imprecise data. Also, a more proactive stance was taken on African urban

9 R. St. A. Davies was the Municipal Native Affairs Officer from 1938 to ca. 1940, when he became Director of African Broadcasting in Kenya. (Kenya Gazette 13. September, 1938, p 1204, and Chikowero 2013).

10 *Report of Committee of Inquiry into Labour Unrest at Mombasa* (Philips Committee), written in 1940, published 1945, and *Report on the Housing of Africans in Nairobi, with Suggestions for Improvements*, by Senior Medical Officer of Health and the Municipal Native Affairs Officer 1941 (Stren 1972, 93-94).

settlement issues at the time. The statistical data provided by earlier mapping exercises were appropriate for monitoring, but less useful for initiating interventions. More attention was therefore given to comparative studies of actions taken by authorities in African urban settlements in neighbouring countries. Also, (perhaps in part due to technical allowances provided by printing) images, maps, and plans were more actively used – for both data collection and analytical purposes.

Between 1939 and 1963 the official views on African housing and settlements were manifold. In light of the reports presented here official views vary from an understanding that the housing of the African workforce was to be a subsidised public service (e.g. Ogilvie), to one where private African enterprise should be allowed to take part in the housing market (e.g. Vasey). But overall, 1939 to 1963 can still be construed as one period because it represents a clear shift from the *laissez-faire* policies regarding the construction of housing for urban Africans in the decades leading up to the 1940s. Between 1939 and 1963 there were consistent (albeit different) attempts to address issues of welfare, housing, and production. Also, the ‘investigative’ attitude seen throughout the period directed at solving African housing issues is markedly different from policies introduced after independence in 1963 when a (seemingly) more coherent stance on social housing and popular settlements was adopted by the authorities.

*G.C.W. Ogilvie: The Housing of Africans in the Urban Areas in Kenya (1946)*

The report, dubbed a “brochure” by its author, is a mapping of the quality of dwellings in various housing estates for Africans (mainly in Nairobi). The report is divided into two main sections, one describing the poor condition of houses in many of the current settlements in Nairobi, while the second presents a number of successful housing schemes already implemented by Government and the City Council on virgin land.

In the first section, where the insalubrious housing conditions are described the report also argues that far from tearing such settlements down they should be allowed to remain because they provide crucial dwelling spaces for Africans in a city where pressure on the housing market is too high. The argument allows for conditions in places such as Pumwani to be set aside, to be dealt with at a later time when ample housing for Africans has been provided through new housing schemes. By such time the market would eventually have taken over and altered the slums, it is argued (1946, 15). Ogilvie’s mapping, as in other reports at the time, produces ample evidence of the dire conditions in places like Pumwani. Such evidence was not collected in order to suggest interventions in these communities, but rather to prove the necessity of building new developments elsewhere.



Figure 2.1 Salubrious family housing in Starehe, from Ogilvie (1946).



Figure 2.2 Insalubrious housing in Pumwani, from Ogilvie (1946).

The second section of the report depicts already implemented, successful housing projects with a focus on describing the schemes, mapping the layouts of the houses, and providing a technical run-through of the buildings themselves, as well as a description of what is provided and improved through these projects<sup>11</sup>. These are new developments in mapping related to African urban settlements in Nairobi. Ogilvie uses images as a part of the data collection to suggest a picturesque and spacious setting, ample greenery, and a quaint house, almost rural and cottage like, such as in Starehe (Figure 2.1). These images are indicative of the success of the Council in providing

<sup>11</sup> The focus of the mapping is of a technical nature. This may have to do with Ogilvie’s training as an engineer.

adequately functioning houses for the African urban population. In addition, the sections and plans provided are an analysis of the data collected: a technical run-through of how the different units are built and a description of the utilisation of spaces underpin the conclusion that these housing schemes represent an effective solution for adequately housing the African urban worker and his family.

Such conclusions need to be seen in light of the political drive at the time for providing adequate housing for African families – born out of a change of rhetoric where the African worker was most industrious if given permanent housing for himself and his family, rather than being seen as transitory labour which was the case in prior decades (Lewis 2000, 22-52). In addition, Kenya was seeing its fair share of social unrest at the time, to which Ogilvie states, “at the root of all these problems is the major one of housing” (1946, foreword).

By showcasing good examples of housing, and juxtaposing this with poor conditions in e.g. Pumwani (Figure 2.2), the report underpins the correctness of focusing on better housing for families as a policy approach to the *African problem*. Though Starehe is located just across the road from Pumwani, Ogilvie’s representation of Starehe was worlds apart from Pumwani; depicted as an overcrowded and filthy urban location.

The suggestions provided in the Ogilvie report are further underscored by a short review of how schemes should cope with social welfare, how the schemes were to be best managed, and how allocation of housing should be achieved. Here, Ogilvie points out that the only way for housing schemes, such as the ones exemplified, to function properly is if they are expertly managed and applicants allocated housing on the basis of their ability to fulfil criteria relating to: size of family, probable permanency, and ability to pay rent.

In essence, the recommendations of the report favour the permanently employed labourer over those in the informal sector or those without a steady salary, thus exacerbating social differences between Africans. This was in keeping with government policies of only welcoming Africans with skills and work to the city.

But Ogilvie’s example projects weren’t all about showcasing quaint settings for African urban dwellers. It was also about modernising African wage workers to fit European standards:

Future schemes will, no doubt, have to provide for increasingly improved types of housing, and as long as it long has been the general policy to raise the standard of living of the African, we may well soon see extensive multi-storey housing schemes with all the usual fittings and amenities. (Ogilvie 1946, 63)

In many ways such visions were forerunners to what Nevanlinna sees as the administration’s promotion of “the ways of life of the middle classes

as models for other social groups” (1996, 297), which was to increasingly become the norm towards independence and after.

*M. Parker: Political and Social Aspects of the Development of Municipal Government in Kenya with Special Reference to Nairobi (1948)*

Mary Parker’s academic thesis focuses in part on the changes that were occurring in building production in the late 1940s. Parker’s thesis has since been influential, featuring as a source in a number of academic writings on Nairobi (e.g. Nevanlinna 1996). Parker’s work emanates sentiments that can be seen as typical to the worldview of the late 1940s regarding ‘African affairs’, showing that also academic mapping ventures were products of their time: aims, data collections, and analysis are entwined in the social and political context in which the mapping is produced.

Methodologically, Parker’s thesis represents the shape of things to come. Parker’s work differs from e.g. Ogilvie and Vasey in that she offers an independent, academic analysis of housing policies in Kenya, where as Ogilvie and Vasey are administrators reviewing the administrative system. Parker thus exudes a more analytic, academic approach, perhaps progressive at the time. Though most of her work takes the form of desk studies, she is not merely an opinionated expert from the outside looking in. She attempts to uncover residents’ voices by carrying out interviews, a method that became increasingly popular in decades to come.

Parker provides an historical backdrop to the development of African housing and settlements in Nairobi, distinguishing between an early period where Africans were left to “fend for themselves”, followed by an allocation of specific locations set aside for African housing developments, where the municipal authorities provided housing for their own employees. This was followed by a period of “economic housing on an economic basis” for those who were not government employees. Parker produces a non-critical review of the history of housing provisions by Government for the African urban population up to the 1940s, echoing official rhetoric from the previous period: that African settlements had to be brought under official control due to insalubrious conditions and the spread of disease, vice etc.

With regards to the revision Parker delivers of housing policies after 1940, her detailed account of a number of projects shows that 1) despite her in-depth knowledge of the subject matter she does not provide analysis or critique, but that 2) the breadth of the account does in itself reveal the direction of government policies through the decade, as well as official proclivities and tendencies to see the ‘African problem’ as one connected nominally to housing (Parker 1949, 86-88).



Parker's mapping is an attempt to uncover official praxis with regards to African urban settlements and housing and how this praxis is in keeping with or out of sync with official rhetoric. As such Parker provides an important mapping of conditions at the time. However, Parker's mapping - its framing, data collection, and conclusions need to be seen in light of her empirical sociological approach which overly focuses on race relations, as well as in light of the dated social views and sentiments that colour the analysis in the thesis.

Though Parker's independent academic standing enables her to be more critical of housing policies and their effects, she refrains from criticising the overarching structures of the system. She does not take on the sentiment so clearly expressed by academics in the field some 20 years later, where their analysis gave way to a critique of the fundamental structures of the system: where poverty, and not housing in itself was seen as a problem related to the uneven distribution of resources, representation, and power.

*E.A. Vasey: Report on African Housing in Townships and Trading Centres (1953)*

Where Ogilvie paints an idyllic representation of what life could be like in African locations when subsidised by the government, Vasey presents a more progressive, market oriented solution to the 'African housing problem'. E.A. Vasey was Mayor of Nairobi for two terms prior to the writing of this report. Vasey was considered progressive, and had "a keen sense of the coming independence, and the need to prepare for it". At the heart of the report, says Stren, is Vasey's belief that problems related to tribalism among Africans could best be solved if all Africans had equal access to the modern economic system (Stren 1972, 69)<sup>12</sup>. Vasey wished for Africans to partake more actively in shaping their own urban futures.

Methodologically, Vasey utilises this background and his longstanding experience from colonial administration in analysing African urban settlement and housing issues. As such Vasey represents the 'old-school' administrator expert. Yet Vasey is also a representative of new mapping methods, chiefly comparative case studies. The Vasey report is written on the back of a number of sources having observed and mapped housing conditions and practices in various African settlements at the time. Many of the examples of practices are collected from Southern Africa, e.g. Rhodesia and South Africa. Vasey analyses current conditions in urban areas in Kenya in light of these examples, drawing on his long experience and personal interests. Recommendations for future developments are based on these

analyses. The use of comparative case studies is borne out of political needs at the time: there was a general political agreement that there needed to be a presence of permanent African residents in Nairobi. In order to suggest solutions for settlements and housing issues, it followed that the Kenyan administrators should look to other regions in Africa (e.g. South Africa) where Africans had been urban for longer.

Experiences from elsewhere in Africa proved to Vasey that the African renter has little understanding of the finer points of a free market and its effects on rent, rent increase, subsidization, and so forth, and that natural fluctuations and changes in the market are treated with resentment by the African population. According to Vasey, African renters tended to direct their antagonism at Government, being the main provider of social housing. This created an unviable and negative climate in the housing market in cities like Nairobi. Vasey believed the solution to be to let more African landlords into the housing market, so as to 1) let the provision of housing not only be a public burden, and that 2) problems related to rent increase and market fluctuations not be mechanisms used to nourish anti-government sentiments among African renters.

Vasey admitted that there were possible social ills connected with letting African landlords unscrupulously exploit the working class (as e.g. Parker argues). But, he argued if more potential landlords are let into the market, there will be more competition in providing accommodation. Following, rents would regulate themselves, the market would eventually be a renters rather than a landlords market, and more Africans would be 'schooled' in the workings of a modern economic system.

Stren sees Vasey's report as seminal because of the impact it had on planning measures in African locations (Stren 1972, 68). The recommendations are progressive in the sense that they open up the market to African enterprise, thus empowering (some) African landlords. Stren sees links between this sense of empowerment granted African entrepreneurs, and Vasey's personal friendship with Africans and Indians, as well as his modest background from England (Stren 1972, 69).

If seen in light of the decade in which the report was created, other issues may also have influenced the analysis and recommendations in the report. As the early 1950s was a period of growing African political awareness, anti-government sentiments were increasingly viewed with concern by the authorities. As such, the connections between rent increase, discontent, and public housing provision created an unfortunate extra burden for Nairobi City Council and Government, already on the verge of declaring a state of national

<sup>12</sup> Vasey became Minister of Finance in 1952, a position he held until 1959.



Figure 2.3 The Ofafa Jericho social housing scheme. According to McVicar the design was reminiscent of “prison-like structures” (1969, 57).

emergency<sup>13</sup>. So while on the one hand progressively allowing certain social groups of Africans more (market driven) power, it also consolidated colonial control by partially removing some of the added burdens connected with social housing provision from the public to the private sector.

In the report Vasey’s analysis is well grounded in the mapping covered in the appendixes of the report. For instance, Vasey’s recommendation of letting African landlords to a greater degree supply housing to African tenants mirrors “the general policy adopted in South Africa” of which the appendixes approve (Vasey 1953, 35). In light of the looming conflict in the early 1950s in Kenya, and Vasey’s own personal agendas, this report is indicative of close connections between motives, data collection, provision of empirical evidence, and analysis in mapping efforts.

In keeping with policies at the time, the results of Vasey’s mapping underscore the need for higher densities in African housing schemes. Although the picturesque garden city inspired schemes presented by Ogilvie in 1946 were an ideal of sorts, such schemes did not have the densities required to reach objectives of sufficiently housing African workers in Nairobi. This was already brought to the fore in 1948, where Thornton White’s Nairobi Master Plan suggests implementing *neighbourhood units*.

<sup>13</sup> Emergency was declared in 1952 and lasted until 1960, see more about this in Chapter Seven.

“The number of persons we can accommodate for will increase considerably without reducing the net density zoning” (Thornton White 1948, 47). Schemes such as Bahati (1950), Ofafa (1954), and Mbotela (1955) were driven by such recommendations and, according to McVicar, resulted in “prison-like structures” (Figure 2.3) equally informed by the Government’s “preoccupation with security” during the Emergency (1969, 57).

Though the morphology of these projects were drastically changed compared to the Garden City layout of e.g. Starehe, the logic of better, sufficient, and secure housing for the African work force and their families was at the core of both kinds of schemes. Mapping efforts carried out by both Ogilvie and Vasey helped underpin this.

### 1963 – late 1970s

Many scholars have argued that independence did not bring about substantial changes to urban planning in Nairobi. The new administration simply inherited the planning policies of the colonial authorities, exchanging racial segregation with class segregation (e.g. Stren 1972, Nevanlinna 1996, Anyamba 2006). There is however evidence to suggest that class based divisions had been a part of the planning logic of Nairobi long before independence, and that these class based social differences were not only articulated between East and West (as pointed out by e.g. Nevanlinna 1996), but were also internal to the settlements in the East, much as a result of administrative policies<sup>14</sup>. The housing projects brought to the fore in the previous periods are examples of how certain social groups were favoured over others. Social housing schemes initiated after independence such as California in Pumwani, are indicative of a sustained distinction between social groups. While efforts to mitigate the African housing problem before independence focused on catering for a more complacent and productive workforce, urban planning and social housing after 1963 became vehicles for proving the success of the newly created nation state. In both periods, social differences between those who could afford to aspire towards the middle class and those who could not were exacerbated.

As with the period before, 1963 to the late 1970s was a period characterised by various approaches to solving African housing and settlement issues. Based on the examples provided, mapping was also diverse. Government initiated investigations on how to tackle the ever-growing problem of urban poverty, and there were large-scale investments in housing estates. Later in the

<sup>14</sup> See the historical review of Pumwani in Chapter Seven for an example of this.

period came academic attempts at mapping and analysing the effects of such investigations and ensuing projects.

In the period between 1940 and 1963 officials were most concerned with constructing new locations, producing mapping reports discussing how to structure such locations, by what means, and with what amenities. After 1963 reports and mappings would also focus on how to best improve conditions in existing settlements in addition to the planning of new housing estates. Discussions regarding the (re-) developments in existing settlements gave room for academic involvement and trying to understand the root causes for detrimental conditions in existing African settlements. In Nairobi, distinctions within the period can roughly be split in two. Early official mappings looked at how to best develop existing urban poor areas so that they could become a part of the city 'proper'. A decade later, academic mapping efforts looked at how these urban poor areas had developed and how the brunt of the urban poor population were marginalised from these developments.

A common theme for the period was the improvement of conditions in existing urban poor areas or slums. During the course of the period mapping efforts carried out by administrator experts 'on the outside looking in' were increasingly replaced by mapping efforts by academic experts from the social sciences and urban planning that sought to include internal resident's points of view as part of their data collection and analysis. This represents a clear shift in the approach to mapping. Both administrative and academic mapping exercises relied on more qualitative data than in previous periods, with analysis of data being more evidence based than the previous periods' experience based analysis.

The growing academic interest in urban development issues in the South at this time needs to be seen in light of two things. Firstly, the growth of academic disciplines such as social anthropology, sociology, and social geography throughout the 1960s and 1970s. Secondly, the coming of independence in African states meant the end of colonialism and the beginning of aid, which provided an opportunity for the social sciences to critically examine developments in the global South. In this period many of the discourses on post-colonial urban issues that we know today developed significantly.

With regards to academic mapping efforts, Stren summarises that research conducted on urban Africa in the period after independence generally looked at:

... causes of urban growth (rural-urban migration in particular); its implications (questions of social integration and/or conflict; the morphology

of the city); and the response patterns of governments in terms of town planning policy, housing policy, and regional planning policy which might mitigate the worst effects of primate city development. The tone of much of this literature was benign and optimistic. (1994, 2)

The optimism can perhaps be attributed to the future hopes of a post-colonial nation. The Pumwani Redevelopment Phase I can be seen as borne by such hopes. The project was to shrug off the yoke of colonialism, and build a new African urban identity. Nairobi's Mayor, Councillor Isaac Lugonzo, said the following at the official opening of the scheme:

In the depressing slums of Majengo (Pumwani) which we have sworn to remove, lies the record of achievement of the Colonial administration. Here in Pumwani Redevelopment Phase I lies a pointer to the future of our people – a future of prosperity and social justice. It is an indication, we hope, that we, the civic administrators, are heeding your call for the improvement of the life of our ordinary people. (Bujra 1972, 21)

The various names given to the redevelopment scheme also reveal some of the political intentions connected to urban redevelopment in the 1960s. *Pumwani Redevelopment Phase I* is indicative of the optimism of the times, simply because it implies plans for more redevelopment phases. Just as future-oriented was the scheme's alternative title: *New Pumwani*. The scheme was also referred to as *The Pumwani Relief Scheme*, bringing other connotations to mind, of dire need for reconstruction in the aftermath of colonialism. But seen in relation to another government funded building scheme to its immediate South, dubbed *Biafra* by residents, *Pumwani Relief Scheme* smacks of irony. Indeed, residents seem partial to irony when naming neighbourhoods in Nairobi. *Pumwani Redevelopment Phase I* is today known as *California* (written Calfonya locally), with all the hopes and aspirations such a name evokes.

With the coming of independence pressure was exerted on the Kenyan government to address planning and housing issues with more effective policies than that of previous administrations. Several plans and schemes were developed in the period. Bujra holds that 15 years after independence the City Council had constructed 12 new housing estates. With the early 1960s marking the beginning of international aid, the Kenyan Government was also in a position to receive assistance and advice from outside. This was done e.g. through the *United Nations Program for Technical Assistance* where UN experts visited Kenya in 1964 to conduct a study of the short and long term housing needs in the country in order to make recommendations for housing policies (Bloomberg 1965, 1).

Not only did the period produce government and donor initiated mappings that were to form a platform from which schemes such as California could be built. The period also produced research-based mappings critical to the implications of housing schemes such as California, as is the case with Janet Bujra's *Pumwani: the politics of property* (1972). According to Stren, this was typical for this period in post-colonial Africa, where research shifted between being a proponent for political emancipation, and producing important insight into the effects of this political emancipation:

During the 1960s and 1970s, researches tended to take thematic direction from a combination of factors including the demands of various important disciplines, and the needs of urban development as expressed in the African countries in which they were working. This delicate balance between local need and research agenda functioned to some degree... (1994, 14).

Much like in previous periods, 1963 to the early 1970s was a period defined by a close relationship between mapping and politics.

The reports looked at in this period are: E.T. Farnworth's *Address to the Pumwani Housing Committee: A Survey of the Problems of Redeveloping Pumwani Estate* (1964), J.P. Mbogua's *Pumwani Estate Social Survey* (1965), D. Etherton's *Mathare Valley - a Case Study of Uncontrolled Settlement in Nairobi* (1971), and J. Bujra's *Pumwani: the Politics of Property* (1972).

*E.T. Farnworth: Address to the Pumwani Housing Committee: A Survey of the Problems of Redeveloping Pumwani Estate* (1964), and *J.P. Mbogua: Pumwani Estate Social Survey* (1965)

I will look at E.T. Farnworth and J.P. Mbogua's reports together, as the Mbogua report is written on the back of the Farnworth report, and they are both concerned with the same issue: the redevelopment of Pumwani. Both Farnworth and Mbogua reports are products of a long history of attempts to redevelop Pumwani: ever since 1927 plans for total rehabilitations of the area have regularly surfaced. Municipal proceedings show that the redevelopment of Pumwani was brought up in 1941, 1946, 1951, 1954, 1961, and 1962.

In 1963 a subcommittee was appointed to deal with the planning and construction of The Pumwani Urban Renewal Scheme Phase I, later dubbed California. The scheme was carefully backed by the Farnworth and Mbogua reports, both of them mapping and analysing conditions in Pumwani, but with different results.

In April 1964 the Chief Valuer of Nairobi City Council, E. T. Farnworth, presented A Survey of the Problems of Redeveloping Pumwani. The premise of Farnworth's report was "to present sufficient information in a logical order,

to enable the Council to establish (the) principles (of the type of scheme required)" (Nevanlinna 1996, 223).

In terms of the mappings, i.e. the premise, data collection, and analysis provided by Farnworth, Nevanlinna states that there were four main issues brought to the fore and discussed in the data collection to help pinpoint the magnitude of redevelopment necessary: problems of crime, problems of sanitation, problems related to visibility for visitors to Nairobi, and potential value of the land. Of the four, only "the argument of the incomplete use of the potential value of the land (...) favour(ed) (...) demolition and rebuilding" (1996, 223-224). Still, this was a decisive argument, with Farnworth pointing out that Pumwani's location near the city centre made it too valuable to retain for housing only (Hake 1977, 134). With regards to these recommendations, Farnworth was in line with earlier conclusions that the whole of Pumwani should be redeveloped in one fell swoop. Also, the new regime in Kenya perceived Pumwani as an eyesore. It was, says Nevanlinna, seen as "suitable for demolition and rebuilding because of its proximity to the city centre, its legal status as publicly owned land, and the terms of allocation allowing the City Council to remove undesirable elements relatively easily" (Nevanlinna 1996, 225). On many accounts Farnworth's mapping and subsequent report thus mirrored political viewpoints at the time.

However, Farnworth was of the opinion that the once powerful landlords of Pumwani were themselves of little economic value to the City Council, and that they had grossly overstepped their allowances in terms of building footprints. Farnworth suggested a new plan and layout with a lower inhabitant density and that landlords and existing tenants be allocated housing on equal basis. Politically, this may have been problematic.

A year later the Pumwani Redevelopment Subcommittee had commissioned another report to "build on the findings in the Farnworth report" (Mbogua 1965, 1). The Mbogua report reversed some of Farnworth's recommendations concluding that ample provisions needed to be made for landlords (1965, 11). The construction was carried through on the basis of Mbogua's recommendations.

As early examples of mapping efforts in the post-independence period, both Farnworth and Mbogua reports' lean methodologically on previous periods. Especially Mbogua's report is based on a number of quantitative data collections with relation to households and trade. But Mbogua was doubtful regarding the usability of a method where quantitative data collections are to generate redevelopment proposals: "in attempting to generalise and apply the observed conditions in arriving at specific proposals without comprehensive and detailed research work some facts are bound to be shadowed" (1965,

10). The numbers, Mbogua points out, merely scratch the surface of deeper, underlying issues: “No generalisation can escape the possibility of being inadequate, because it is based on observed conditions which themselves are dictated by unobserved ones” (1965, 10).

Other methodological issues also echo earlier mapping periods. Farnworth and Mbogua both represent the administration, in contrast to later academic mapping efforts. As such they adopt the administrators’ and the Council’s official and outside view of conditions in Pumwani – but only to an extent. Dialogue was initiated between mapper and local groups, thus going further than earlier mapping efforts in trying to cater for multiple points of view.

The dialogue allowed for distinctions to be made between different social groups in Pumwani. Pumwani residents were no longer seen as a homogenous group of urban poor, but rather as varied and distinct groups with various interests and claims. Despite the social distinctions made as a result of Mbogua’s mapping method, the groups that arguably received the most attention were traders and landlords – the most politically vocal groups in Pumwani. Later academic mapping efforts (e.g. Etherton) were perhaps better able to balance the different viewpoints of resident groups.

If seen in relation to one another, the Farnworth and Mbogua reports are – in terms of their mappings and subsequent recommendations – in keeping with current policies at the time. In the case where Farnworth’s findings created possible contention between the Council and landlords/business owners in Pumwani, Mbogua’s analysis allowed for a reversal of these findings, providing more leeway for landlords and business owners, possibly catering for a smoother redevelopment process. Methodologically, Farnworth and Mbogua represent traditions from earlier mapping periods, while (carefully) introducing mapping methods that were to become prominent later in the same period.

*D. Etherton’s Mathare Valley - a Case Study of Uncontrolled Settlement in Nairobi (1971)*

Etherton’s study is the joint work of six university departments from three universities in collaboration with one government department. The study is an example of the “delicate balance between local need and research agenda” (Stren 1994, 14) common to the period, and is representative of the transition that occurred between the government-initiated reports in the early 1960s and academic research conducted in the early 1970s.

The aim of the study, according to its authors, is to show the importance of the problems connected to uncontrolled settlement developments in the

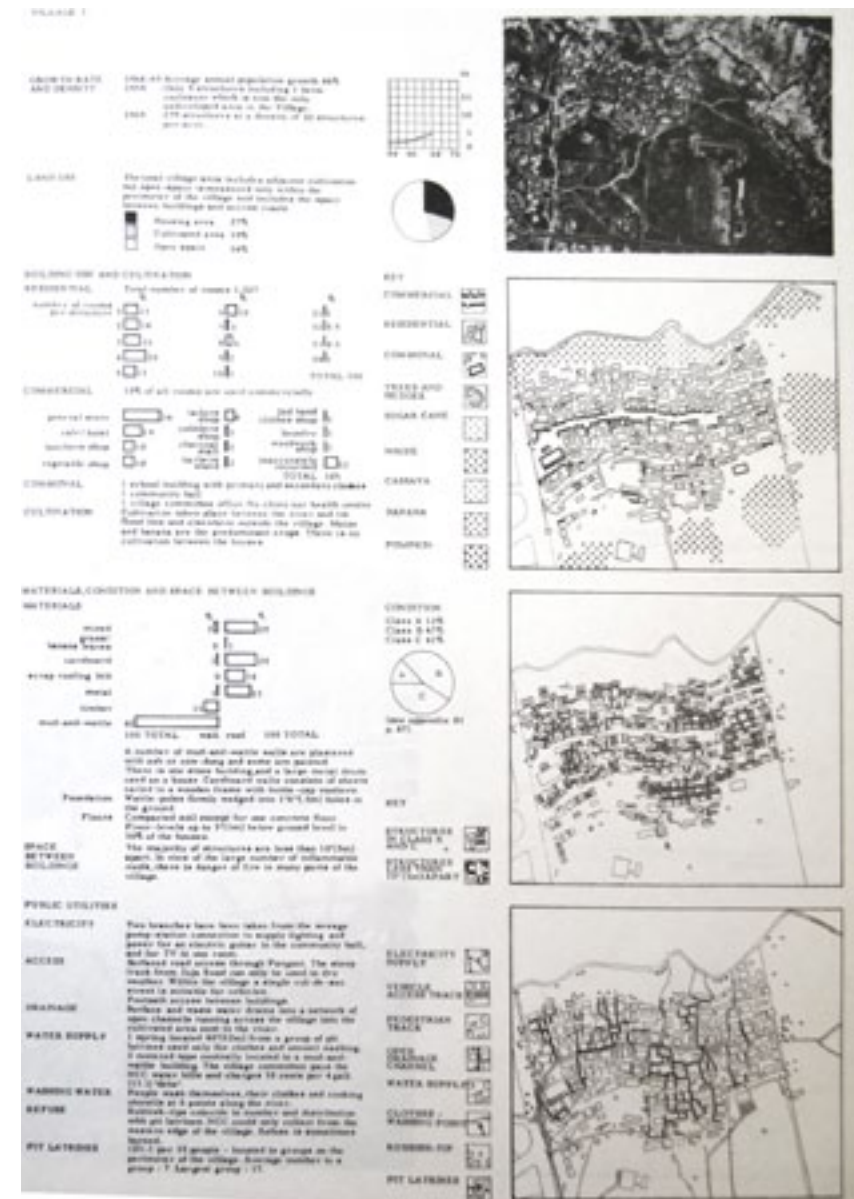


Figure 2.4 Example of the academically oriented data collection and mapping carried out in Etherton’s study (1971).

hopes that such problems “no longer be regarded as socially marginal and physically insignificant but rather as one of the most crucial aspects of the city’s future developments” (Etherton 1971, v). The language in the report is of the benign character as described by Stren (1994, 2), focusing on e.g. “the poor” and their “resourcefulness” (Etherton 1971,v). In other words, not only is the study an example of the transition between government and academic work. It is also an example of the transition occurring within the period in both language (how the urban poor are characterised) and focus (where a growing concern with people-oriented issues is apparent).

The data collection and mappings presented in Etherton’s study differs methodologically from many previous data collections, and is evidently influenced by the academic foci of the authors. The mappings make use of visual material in the form of maps, charts, diagrams and images to underpin their arguments. The study’s interest in showcasing the logic of settlements such as Mathare, and to provide more ‘intimate’ insight into the daily routines of the urban poor and their social fabric is convincingly conveyed through the mapping methods applied. By providing a series of structured, visual analyses of the villages that comprise Mathare, the notion that such settlements are indeed structured, with their own logic and systems is clearly conveyed (Figure 2.4). Such portrayals of urban poor settlements as being logical rather than haphazard and chaotic is intrinsic to the main arguments carried by Etherton’s study: that it is logical that the poor move to the city to find economic opportunities, and that it is logical that they converge on illegal settlements because it is the only place where they can hope to start to aspire to move upwards on the modern economic ladder.

Some conclusions in Etherton’s report do not change drastically from those in colonial reports. As in previous (and future) periods the study concludes that urban poor settlements should not all be demolished. The reasons given are however different: while previous reports would argue that poor settlements were necessary in order to sufficiently house the urban work force (until newer and better accommodation could be built), the logic in Etherton’s report is that settlements such as Mathare represent bridgeheads for people seeking to earn a regular income. The argument for providing sufficient work opportunities and increased wages is pivotal: if sufficient job opportunities and wages are not provided elsewhere (e.g. in rural areas), urban poor areas will and should continue to exist because it is the only opportunity for the poor to “gain an economic foothold in the city”. The status of such areas should therefore be recognised and be made legal (Etherton 1971, iix and 70-72).

With his cross-vocational academic approach to mapping, Etherton manages two things: he is able to obtain a partial ‘insiders’ view of who “the poor” are

and is able to document their “resourcefulness” and; he convincingly portrays a settlement with its own logic and accord. By doing so Etherton produces a mapping of Mathare that through data collection and analysis fulfils the agenda of the study, which was to show the importance of such settlements, and that they cannot be brushed off as marginal urban developments.

*J. Bujra: Pumwani: the Politics of Property (1972)*

Bujra provides one of the most insightful mappings and analyses of Pumwani after independence. Seen in light of Etherton’s work two years earlier, Bujra examines even deeper the fabric of popular settlements through her case study in Pumwani. Her work focuses on the effects of the California redevelopment scheme, providing insight into the complexity of social relations in Pumwani, and its intrinsic connections to built form. Bujra’s work is an example of the growing importance of academic work focussing on urban poverty issues, and how the period gave rise to a growing number of critical voices that come out of a variety of academic traditions such as sociology, social anthropology, history, social geography, urban studies, and architecture to create a discourse on the African city.

Bujra’s research is methodologically based on interviews with residents in Pumwani, and comparisons between these interviews and official documentation connected to the California redevelopment scheme. Bujra thus manages to partially shift the perspective of the mapping effort from the professional ‘outsiders’ analysis of conditions to a more bottom-up ‘insiders’ opinion of conditions. As such, Bujra’s work represents a clear shift in the way in which data is collected in mapping efforts, in keeping with global, academic trends within sociology and social anthropology at the time.

Other mapping efforts in Nairobi at the time corroborate this trend: e.g. M.H. Ross’ *Politics and Urbanization: Two Communities in Nairobi* (1969), K.G. McVicar’s *Twilight of an East African Slum* (1969), and S.S. Hennein’s *The Study of Family Structure in Pumwani, Nairobi, Kenya* (1972). In contrast to these examples however, Bujra’s analysis is grounded in a more structural understanding of the politics of housing and settlement issues, revealing both connections and disconnects between the ‘insider’ resident point of view and overarching urban development policies in Nairobi at the time.

I lean heavily on Bujra’s work in Part II of this thesis, and a thorough review of her mapping effort is provided in Chapter Five.

### Late 1970s – early 1990s

In contrast to the extensive investment made in urban research during the 1970s, the decade of the 1980s has seen a decline in the quantity of urban research in both developed and developing countries.

(World Bank 1991, 75-76, in Stren 1994, 7)

Stren argues that the above quote exemplifies the common feeling among researchers regarding the production of urban research in Africa in the 1980s. Stren's study reveals however that a count of thesis, papers, and proceedings show a general rise in research production in many regions in the period. However, East Africa stands out as a region where urban research was on the decline. This decline, says Stren, can be explained in two ways: "the economic crisis and the undermining of institutional support for all aspects of scientific research", as well as: "a shift in development strategies which have de-emphasised the spatial dynamics of development" (1994, 8). This resulted in a shift in the research that was produced. While there was a noticeable local grounding in the period after independence, "the national framework for research funding broke down during the 1980s under severe economic pressure". Thus "research agendas began more and more to be set by international agencies" (1994, 14).

Amongst others, this resulted in a lingual shift among researchers. Stren writes: "many of the more abstract and transcendental ideas that were popular among researchers during the 1970s (such as 'dependency', 'underdevelopment', 'hegemonic control', and even 'the state') (were) replaced by more mundane, lower level concerns which focus on local and even micro-level case studies. 'Local government' has replaced 'the local state', and 'urban management' with its undeniably technocrat overtones (began replacing) 'urban planning' (and its romantic vision)" (1994, 11). In Nairobi an increasingly fickle planning language is exemplified by the titles of the three official spatial plans for the city. The *Master Plan* from 1948 was followed by a *Strategy* in 1973, finally being replaced by a *vision* in 2008. The focus among urban researchers between the late 1970s and the early 1990s was predominantly on housing (broadly defined), urban services, and slums in this period (1994, 4). Urban management can be seen represented by e.g. A. Guido's *Space Standards for Urban Low Cost Housing in Kenya* (1979), which focuses on defining "a method for the definition of living space, dwelling size, plot size and plot use, heights and densities", and that the author hopes will be particularly useful "during the current review of Kenyan planning and building legislation" (1979, I).

Stren states that the small amount of research conducted is hard to "characterise in a coherent fashion". He argues that one reason for this may

be that – in contrast to the 1960s and 1970s – the 1980s with its liberal and differentiated (explanations of) economic life also influenced research (1994, 12). The liberalisation, and subsequent competition, in research led, according to Stren, to three things; a 'pulverisation' of research ideas and the community (specificity of topics and competition); selection of topic governed by financing agencies; and lack of publication (or internalised publication) that gives little back to the field or the object of study, resulting in poor long-term planning, and poor dispersion of knowledge (1994, 12-13).

It is possible, however, to find palpable academic work produced in the period. For instance, proceedings from *The First International Conference on Urban Growth & Special Planning of Nairobi* published in *African Urban Quarterly* (University of Nairobi 1988) show that Kenyan universities conducted substantial amounts of research on urban development and poverty, and that research topics were varied. For the conference papers were produced on themes such as: climate and planning, urban-rural processes, urban hydrology, CBD redevelopments, ethnicity and poverty, local building resources, the public sector and housing policies, public transport systems, urban agriculture, gender, and youth.

Another example of critical academic research is e.g. P. H. Amis' extensive *A Shanty Town of Tenants: the Commercialization of Unauthorised Housing in Nairobi 1960 – 1980* (1983). Basing his study in Kibera – an area renowned for its slumlords – Amis argues that the growth of the informal sector is intrinsically connected to capitalist market mechanisms and power, and that emphasis in the urban development sector on "autonomy, self-help community development, or illegality" in informal settlements has limited effect (1983, 322). Amis' focus on macro economic issues is perhaps in keeping with the atmosphere of the period, but Amis is critical to the liberalisation of the housing market, arguing that Government and international agencies aim to create political stability by "extending capitalist relations and integrating unauthorised settlements into the wider political economy" (1983, 295), but have only been successful in catering for capital accumulation "through large-scale landlordism" (1983, 298).

Not only was urban development increasingly taken over by the private market (legitimate or illegitimate). Research on urban development was also subject to liberal orienteering. This meant that many studies were carried out by research consultancies. The drawback of this shift lies in the time/budget-bound project frameworks, and "limited terms of reference," says Stren. Often studies were carried out by NGOs – for a fee – in effect making them bona fide consultancies (1994, 12). In correlation with this, Amis notes that since the mid 1980s Nairobi City Council and the authorities had gradually

withdrawn from housing provision, leaving the market open for private enterprises (1996, 274). This meant that the private market increasingly dominated both urban development and research on urban development.

Few examples of mapping efforts exist from the period in Nairobi. One example is Matrix Consultants' *Nairobi's Informal Settlements: An Inventory* (1993), which also serves as an example of research consultancy work at the time (prepared for US AID). According to its authors, the mapping is heavily based on the interpretation of aerial photography and previously produced research. The method creates a curious distance to the subject matter, which arguably suits the trends of the period – focussing on broadly defined issues in relation to urban developments. According to the authors, the only time settlements were visited were “when it was uncertain from the photography whether an informal settlement existed and to settlements where the name was unknown” (1993, 3). When choosing which previously written research to rely on, those with the largest data sets were chosen over others (1993, 2), indicative of (a return to) a reliance on quantitative data over qualitative data. A mapping – such as it is in an inventory – is supposed to be a cursory exercise, different from e.g. the academic investigations presented in the previous period. Qualitative methods may therefore be preferable to quantitative methods. However, the data sets provided for the different settlements seem to curiously echo earlier (colonial) mapping periods: attention is given to e.g. average number of dwellings pr. hectare, average square metre size of dwellings, latrines pr. person, and number of health clinics within walking distance of settlements (1993, 13-29).

Five years prior to this, Kiamba and Syagga produced a similarly cursory mapping of Pumwani in an academic study trying “to understand the socio-economic conditions of the urban poor” and examine housing conditions in order to suggest policies that would “make decent housing more available for the urban poor” (1988, 2). In contrast to Matrix Consultants, Kiamba and Syagga's mapping is based on on-the-ground questionnaires in keeping with participatory mapping methods made popular in the 1990s. The topics broached are reminiscent of those provided by Matrix Consultants, with quantitative data on topics such as: house ownership (e.g. how many own, how many rent), number of toilets and bathing facilities, water supply and waste disposal (e.g. number of water points, time spent collecting water, number of respondents identifying waste water disposal as a problem), number of clinics and social centres, and the physical condition of housing.

Attempts were made though to find other methodological approaches to mapping and understanding popular settlements. With documents such as the *Participatory Training Module* (1985), UN-HABITAT broaches a topic important to the final period of mapping efforts in Nairobi, which I

have dubbed *the humanistic period*. In the early 1990s, after over a decade of structural adjustments, focus was again shifted back to people-oriented solutions. Championed by participatory interventions in popular settlements, the humanistic approach introduced mapping methodology that had mainly been reserved for marginal academic and practice-based exercises in the 1970s and 1980s. In this period, understanding popular settlements and its inhabitants through participatory exercises became central. I have chosen to devote the next chapter to these developments.

## CONCLUSIONS

The examples of historical mapping efforts showcased in this chapter represent typical approaches to uncovering and understanding conditions in popular settlements in Nairobi, covering four distinct periods in time. The periods can be defined as; early 1910s to 1939; 1939 to 1963; 1963 to late 1970s; and late 1970s to the early 1990s.

From the early 1910s to 1939 mapping efforts were mostly based on quantitative data collections and administrative expert analysis of numbers; from 1939 to 1963 mapping efforts often included comparative case studies in addition to quantitative data, where administrative experts and a few academics analysed conditions – most often ‘on the outside looking in’. Throughout these first two periods there was a methodological tendency to lean on professional administrative experience in observing and analysing issues in African urban settlements. This is the case in all of the examples gleaned to in the first period, and for most examples in the second period. Also, entwined in this professional experience are personal convictions, backgrounds, and professional training.

Between 1963 and the late 1970s changes occurred where other points of view entered into mapping efforts. Local residents were increasingly ‘given a voice’ most often by academics that were in the midst of defining a discourse on urban poverty in post-colonial nations. Generally speaking, methods shifted towards collection of qualitative data and attempts at evidence based arguments based on this data. By comparison, mapping efforts in earlier periods were based on quantitative data sets, and experience based analysis of the data sets. It is in the period between 1963 and the late 1970s that serious efforts were made to use historical analysis as a part of mapping exercises. This arguably heightened the mappers' abilities to understand the particularities of the local contexts they were working in. Current attempts at creating mapping methods could benefit from studying this way of approaching mapping in popular settlements.



The late 1970s to the early 1990s were characterised by a downturn in production of mappings of conditions in popular settlements. Political focus on structural issues can be seen reflected in methodological approaches to mapping, where e.g. interviews and local participation took the back seat, and liberal economic policies allowed NGOs and consultants to increasingly dominate mapping efforts.

The examples of mapping efforts reviewed reflect the general view of popular settlements by administrators, politicians, and academics in the respective periods. As the list of examples is by no means exhaustive, there are certainly mappings that go against the grain. Still, the reviewed examples are clearly indicative of the periodical, intimate connections between mapping efforts and prevailing politics. The examples show that in Nairobi, mapping efforts have a long history of being used to reinforce policies – and vice versa – that policies have been guiding for mapping efforts. The linking of mapping to politics, and the propositional nature of maps and mapping have a deep-rooted history. As highlighted in Chapter One, this history has been thoroughly examined by writers such as Wood (1992), Monmonier (1996), Black (1997), and Harley (2001), and is important to understand when analysing both historical and current mapping trends in Nairobi.

We are currently entrenched in a period since the early 1990s, where participation and – increasingly – digital tools are seen as important. It is these issues I will turn to in the next two chapters.

### 3. A return to humanism

#### APPROACHES TO PARTICIPATORY MAPPING OF POPULAR SETTLEMENTS IN NAIROBI IN THE 1990s AND 2000s

##### Introduction

The history of mapping in Nairobi shows that in the period between 1963 and the late 1970s many mapping efforts in popular settlements in Nairobi centred on capturing the socio-economic realities of residents. This human scale, micro-focus in mapping was temporarily replaced by a more institutionally centred macro-focus from the late 1970s to the early 1990s. However, by the mid 1990s ‘humanism’ had returned. Not only were people living in popular settlements ‘given a voice’ through mapping, they were also increasingly partaking in capturing that voice. Participatory mapping was in vogue. In many ways this constituted a real change in how mapping was done. Although the period from 1963 to the late 1970s introduced humanism in mapping, it was still carried out by professionals. From the 1990s onwards though, mapping was increasingly done by local participants. Professionals became facilitators. This heightened the focus on methods and tools for mapping. Questions regarding how to map became important. So much so that there today exists a discourse on mapping tools and methods in development.

In current participatory mapping practices in popular settlements it is believed local participation will provide a greater understanding of conditions in such settlements: such practices provide a bottom up approach, up-to-date information and a clear understanding of a place from the local perspective<sup>1</sup>. In some situations this belief is taken to the extreme, where proper understanding of the logics of a settlement is *only* achieved through participation, barring all other sources of information or analytical in-roads. In other cases participation has become a tick-the-box exercise where it is held that if all participatory exercises are followed through, a correct understanding of the local context is ensured. Still, there are a few examples

<sup>1</sup> See e.g. Ashley and Carney (1999), Rakodi and Lloyd-Jones (2002), or Anstey (2012) for different takes on this argument.

that show how neither of the two previous approaches are sufficient, and that participatory practices can be the most rewarding if used in context, and if other analytical tools are appropriated.

The popular use of participation and the switch to bottom-up approaches in poor settlements was the result of a shift in urban development politics. Partially it stemmed from a reaction towards the institutionally based structural adjustment era of the 1980s. There was a focus on creating *livelihoods* with the *household* as a core unit. No longer was it seen as appropriate to raze slums in order to build new housing. Rather, upgrading of existing housing and infrastructure was considered a more people-oriented and appropriate solution to bettering conditions in poor settlements.

In 2003 UN-HABITAT concluded that: “the alternative that has come to be regarded as best practice in dealing with the problems of squatter slums is slum upgrading”. It is, they say, “an affordable alternative to clearance and relocation (which cost up to ten times more than upgrading), but it also minimizes the disturbance to the social and economic life of the community. The results of upgrading are highly visible, immediate and make a significant difference in the quality of life of the urban poor” (2003, 127).

In terms of mapping, participation was necessitated by the growing need to understand urban poor settlements. Understanding of these settlements provided knowledge for adequate interventions to be made in these communities. With time, the participatory processes were deemed able to generate substantial knowledge, especially with the development of frameworks such as the Sustainable Livelihoods Approach (SLA). SLA has provided the urban development community with a common set of tools and methods for mapping popular settlements that can be iterated in a variety of different ways by an increasingly varied NGO and practitioner crowd.

Participatory processes are today used more as a means of empowering local groups in attempts to create more sustainable and equitable conditions in poor communities. I will dub this period of participation the period of humanism. Throughout this period mapping efforts have been geared towards operationalization - towards realising interventions. To coin a neologism, the mappings are in themselves not results: they are tools for further ‘projecteering’.

This is in itself not problematic, but it does take away focus from knowledge production, which in some cases it is believed is ‘automatically’ generated by use of local participation. A number of examples of mapping reports from Nairobi show that it is not clear that such presumptions should be made, and that interventions generated on the basis of local knowledge alone provide anything but a cursory examination of local conditions. It is therefore necessary to question the equating of community based participation and

the understanding of conditions in the community. Further I would argue that for mapping purposes, participatory knowledge production needs to be scrutinised in light of academic research and analysis in order for substantial knowledge about popular settlements to be gained.

### **The structure of this chapter**

The first section of this chapter tries to understand the growth of participation and bottom-up approaches by looking at the policy changes occurring in the late 1980s and early 1990s in the urban development sector. The rhetorical shift that followed underscored a shift towards emphasising better understanding of the conditions in urban poor settlements before implementing interventions. I will look into why such a shift came about, and what the implications were in terms of how participatory mapping developed and was perceived through the 1990s and 2000s.

The second section looks more closely at certain frameworks for participation and bottom-up approaches, and examines the implications of these for mapping. Guidelines for participatory mapping as proposed by UK’s Department For International Development (DFID) will also be examined.

Section three looks at some of the critiques of participatory mapping, both by practitioners and academics, as well as through the optic of my research, such as: the rigidity of mapping methods, issues of participation, how mapping is only one aspect of participatory methods, lack of historical data, issues of scale, and a household focus versus other possible community groups.

The fourth and final section is a brief analysis of a chosen few examples of participatory mapping that have been deployed in Nairobi during the humanistic period – many as a part of larger participatory projects. The examples showcase a range of approaches to participation; participatory knowledge as the only useful source of information; how participation may become a set of mandatory check list exercises deemed necessary in order to push through to a project phase; and more holistic and pragmatic approaches to participation, used in correlation with other means of data collection and analysis.

### **A BRIEF OUTLINE OF OVERARCHING POLICY TRENDS GUIDING PARTICIPATORY INTERVENTIONS FROM THE EARLY 1990S ONWARDS**

In the beginning of the 1990s the approaches among development agencies to mapping popular settlements changed, partially as a result of a larger change in the way agencies addressed development. A growing interest in *participatory* - and *bottom up processes* put the local practices and

understandings of urban poor at the centre of attention in development circles, partially contrasting previous development work of the structural adjustment period that tended to adhere to macro-economic policy levels. This micro-orientation of the humanistic period stressed a more detailed focus on small to medium scale interventions in popular settlements, homing in on upgrading and empowerment strategies: e.g. small scale upgrading projects such as new or improved drainage or school facilities, or local merry-go-round savings schemes for women, while still retaining the *top down approaches* from the previous period by ensuring support for such interventions in administrative and political circles. Such participatory approaches to urban poverty, like the Sustainable Livelihoods Approach (SLA), which in the 1990s and part of the 2000s was seen as the major framework for tackling the problem, involve a number of strategies at various levels of society. For our purposes it is important to understand how it affected mapping: collection of data, and analysis, and renditions of existing conditions in popular settlements in Nairobi.

In terms of mapping, these frameworks such as SLA encouraged a rethinking of how to approach urban poor neighbourhoods, bringing development issues down to a household level, and attempted to involve local user groups. Local participation was (and is) catered for through the use of a number of tools such as transect walks, neighbourhood mapping, and seasonal calendars, while household issues often are elicited through questionnaires and sometimes interviews. By engaging with local groups through discussions, workshops, and assignments, the participation of locals is obtained, issues most important to the various households is sought, and various maps - both of physical and social character - are 'drawn up' in an effort to gain a clearer understanding of the character of popular settlements.

As presented by Wolf (1982) and Short (2009) one could argue that in a larger historical perspective, such practices do not present radically new way of approaching mapping, as there have been long standing practices of participatory approaches to mapping unknown territories in both the Americas and Africa.

Still, it is noteworthy that through current participatory mapping, social issues in popular settlements are brought to the fore and problematized in a different manner than perhaps common to previous mapping periods. According to Ashley and Carney (1999, 45), participation by local residents in projects has become increasingly important because it is one way to ensure that people are put at the centre of development.

Participatory mapping is of course not the only approach to mapping popular settlements in this period, and as such the analysis in this chapter

does not provide a complete picture of mapping in such contexts. Still, participatory mapping is of great importance because it was, and in many cases still is highly popular among organisations in the development sector; e.g. DFID, SIDA, CARE, and UN-HABITAT, as well as local CBOs. These organisations are responsible for a number of interventions and projects in popular settlements, providing a clear link between participatory mappings, interventions, and projects.

### **The growth of participation and bottom-up approaches**

If the bottom-up orientation, household level analysis, and participatory processes can be said to be core traits of the period of humanism the 1990s and 2000s, from where did they derive? The approach to urban development issues in the 'humanistic' period seem to be in stark contrast to the strategic, national-level focus of the structural adjustment period of the 1980s by focusing "on human-wellbeing and sustainability rather than economic growth" (Solesbury 2003, 7). How did household-oriented participatory processes almost become the staple method in dealing with poverty eradication in urban development, in an industry that was more concerned with high-level political and national strategic interventions only some years prior? How did the development sector turn their attention from ministries to households? Unlike the top-down reform-seeking approach associated with structural adjustments, participation and bottom-up processes brought the development sector's focus back to the urban poor. But despite the seemingly drastic nature of the policy shift, the overarching strategic, national focus was never dropped in favour of participation and bottom-up processes. Structural issues were still important, and were in the example of SLA integrated in the framework (Ashley and Carney 1999, 4; DFID 1999, 1.2 – 1.3).

By the late 1980s there was a growing consensus in the development sector seeking to shift how to address poverty alleviation. Starting with the Brundtland Report in 1987, an increasing number of reports from researchers and aid agencies "addressed development in terms of individual and household health, education and well-being, thus shifting the focus away from the macroeconomic bias of earlier development thinking" (Solesbury 2003, 5). The "macroeconomic bias" that had dominated the structural adjustment period of the 1980s was, with its "large-scale and random" analytical approach to poverty, thus in the 1990s challenged by bottom up approaches that sought to be "multiple and subjective" (Moser 2009, loc. 381). Structural adjustments were criticised for not providing any positive change 'on the ground' as they focused heavily on national level political

reforms rather than poverty, and that they “exacerbated rather than alleviated poverty” (2009, loc. 337). Structural adjustment policies were abandoned in the 1990s in favour of policies focusing more directly on poverty reduction (Riddell 2007, 238).

The human-centred political turn in urban development that ensued, partially as a result of such criticism was fronted by heavyweight institutions such as DFID, who were central to developing the Sustainable Livelihoods Approach in the early 1990s. SLA sought to address poverty alleviation by bridging the gap between household and livelihoods-based issues and overarching policy levels (Solesbury 2003, 12-13). It catered for a bottom up approach to development, putting the household and not the state at the centre of economic development. While previous research on macro-micro linkages focused on how overarching national efforts affected communities and households, SLA sought to demonstrate how “initiatives by less powerful and micro level groups in society can and do influence decisions, access and the allocation of resources at higher levels” (Beall 2002, loc. 2401).

In addition to direct policy changes, the livelihoods-centred, project based focus of the humanistic period, and the participatory processes pursued in connection with projects and other interventions were and are in part made possible by the large number of NGOs, CBO, and self-help groups that operate in popular settlements. The structural adjustment period, with its focus on “commercialisation” of aid resulted, amongst others, in the proliferation of aid agencies, NGOs, and CBOs. This created a plethora of projects and agendas – often with overlaps, often in competition with one another. Whereas donors in earlier decades would be more directly involved in development projects, these would have been in the 1990s and 2000s outsourced to NGOs. The World Bank and the UN increasingly have become channelling boards for donor money to NGO and CBO activities on an open market - often in competition with local commercial actors (Riddell 2012, 48-49). In Nairobi, Kibera is an extreme example of this shift: it is arguably the place with the highest density of NGOs and CBOs. Since its rise to fame in the 1990s, Kibera, with roughly 250 000 inhabitants<sup>2</sup> has been seen as an epicentre of urban poverty. It is today awash with a wide range of NGOs, charities, CBOs, self-help groups, youth organisations, and advocacy groups. Large-scale organisations directly involved in Kibera are e.g. UN-Habitat and The Kenya Slum Upgrading Programme (KENSUP). Smaller organisations in Kibera that either work directly with large scale institutions, are funded through bilateral aid or generate their own funding are e.g. Kibera in Need,

<sup>2</sup> Population figures in Kibera are highly contested, spanning from 200 000 to over 1 million. I will here opt for the Kenyan Government’s official census numbers from 2009, that seem to have become increasingly accepted by those working in Kibera (e.g. UN-HABITAT, Map Kibera).

Carolina for Kibera, The Children of Kibera Foundation, Map Kibera, Shining Hope, Kibera Community Youth Programme, Kibera UK, Kibera Hamlets, Uweza Aid Foundation, and The Kibera Foundation. All of the above cater for projects that can be said to have overlapping interests in that they all work to improve awareness, empower residents, and better living conditions in Kibera. This high degree of projecteering is true for many other popular settlements in Nairobi.

Inhabitants in settlements belonging to Pumwani Ward<sup>3</sup> add up to roughly 30 000 inhabitants (GoK Census, 2009). These are much smaller than Kibera and are less known to the outside world. Still, Pumwani Ward as a whole has seen a steady push from organisations working in the community during the last 20 years or more. In 1993 Matrix Consultants claimed there were nine CBO women groups operating in Pumwani Division<sup>4</sup> in addition to the following NGOs: Aid Crescent Medicaid (health), Baptist Mission of Kenya (education), Christian Hostels Fellowship (housing), Compassion International (education and Christian counselling), C.P.K. (education and health), Catholic Church (welfare, education, housing and health), Eastleigh Community Centre (education), Institute of Cultural Affairs (health), Mama Fatuma Good Will Children’s Home (welfare), St John’s Community Centre (welfare and education), Salvation Army (housing and vocational training), Undugu Society (education, welfare, housing, recreation and health), United Muslim Women’s Association (education), World Vision (education), Pumwani Child Survival and Development (welfare and children’s health), P.C.E.A.(education), Voluntary Service Organisation (welfare), Catholic Relief Services (relief).

In addition to a few new NGOs and a slew of new CBOs, a number of the above organisations are still active today. One ‘consequence’ of this activity is that a number of projects have been implemented, or are underway in these settlements<sup>5</sup>.

The outburst of project-making by charities, development organisations, community based organisations and self-help groups, as in the examples of Kibera and Pumwani, has generated a number of participatory data collections, case studies, mappings, and reports on condition in popular settlements in Nairobi over the last two decades. Among the authors are international entities such as UN-Habitat, KIDDP (Italian Aid), and Shack/

<sup>3</sup> Administrative area in Nairobi.

<sup>4</sup> Also an administrative area in Nairobi, larger than Ward.

<sup>5</sup> The number of NGOs and CBOs in Pumwani also need to be related to the specific history of the place: the cohesive nature of the settlements, the old Swahili culture, and their ability to organise and create social structures. This will be covered in more detail in Chapters Seven and Eight.

Slum Dwellers International (SDI), nation-wide outfits such as KENSUP and Pamoja Trust, as well as more geographically locally based organisations such as Map Kibera and St John's Community Centre in Pumwani. Participatory and livelihoods/household approaches in the mappings carried out by these institutions are clearly evident in the documents the organisations have produced during these last years.

Despite the urban focus of the examples given in this chapter, many of the frameworks developed in this period were not exclusively urban-oriented. Fisher claims to have identified 29 different participatory approaches to dealing with poverty, all developed since the 1970s (2002, 8). Longhurst sees such developments as producing a “bewildering confusion of competing intellectual frameworks and alternative paradigms using similar words in different ways” (in Moser 2009, loc 390). Approaches such as Participatory Urban Appraisals (PUAs), for instance, were and are in many cases simply a reworking of the Participatory Rural Appraisals (RRAs) that were developed as early as the 1970s. UN-HABITAT is one organisation that has used PUAs diligently in their work in slums over the last decades, as exemplified by some projects assessed later in this chapter. PUAs are bottom up. They allow for participation of local residents in data collection and planning by implementing a number of tools “that offer tremendous potential if adapted appropriately to specific settings and needs” (Rachel 1997). UN-HABITAT endorse bottom up local participation in planning because it “potentially, (...) can empower communities and build social capital, lead to better design of urban projects and allow participants' concerns to be incorporated within planning strategies” (UN-HABITAT 2009, 16).

But PUAs are not the only way to attempt bottom up approaches to mapping popular settlements. Especially in work stemming from social anthropology, bottom-up, participatory approaches in poor communities had had its grassroots champions for decades (Fisher 2002, 8). Even in Janet Bujra's seminal work on property issues in Pumwani in the early 1970s, her analytical framework can be said to be echoed in what was later to become the pillars of the many SLA-inspired analytical frameworks of the era of humanism in the 1990s.

What was new to the era was that partially as a reaction to the top-down policies of the 1980s, participation had emerged from its marginal status and taken centre stage in development theory. What was also new was the growing interest in policy circles for urban issues during the late 1990s and early 2000s, which was important in terms of paving way for new ways to engage with urban poverty (see e.g. UN-HABITAT 2003). Rather than just providing a mapping-based framework for critically examining and understanding conditions in popular settlements, participatory mapping

methods, such as the ones pushed by SLA, should be viewed just as much as products brought about by what were deemed necessary policy changes within the development sector, as they were bottom-up and human-centred re-workings of previous, structural poverty eradication strategies.

The people centred mapping efforts of the SLA period connect logically to the humanism focus in policies in the same period. That mapping approaches and general policies need to connect with one another is apparent when compared to earlier mapping periods covered in Chapter Two, where I show repeated tendencies for mapping efforts to follow prevailing political paradigms.

### **The post-humanism phase: participation as empowerment**

By 2002 SLA was largely discontinued by DFID (Clark and Carney 2008). The reasons for this abandonment of the model were according to Clark and Carney many, but can in essence be summed up accordingly: the model was too project oriented. DFID were at the time moving towards a more policy-oriented approach to development. The project-based SLA-model, though holistic in its intent, was not seen as conducive to solving large-scale development issues – issues that required re-orientations and reworking of societal and state systems (2008, 2-3). The current paradigm in the urban development sector can thus be seen as a shift back to more structural models, reminiscent of the structural adjustment period.

Regardless of this official policy shift, SLA-inspired models for engaging with popular settlements continued to persist, and are today still the mainstay of many NGOs working in such environments. Though Sustainable Livelihoods as a concept is not mentioned explicitly in such work, one could say that SLA made commonplace the participatory processes for engaging with residents in such settlements - processes that today have shifted into what can be dubbed a ‘post-humanistic phase’: the equating of participation with understanding is taken for granted, and more attention is given to how participation can be a process of empowerment.

Processes of empowerment are important because vulnerable groups can easily be made into pawns in the power play between NGO, donor and state. Moser (2009, loc. 1415-1462) writes of Plan International's participatory processes in Ecuador in the mid 1990s that they intentionally barred local groups that were seen as too politically motivated from participating in local planning issues<sup>6</sup>. Plan International would instead form their own de-politicised participatory groups in their place.

<sup>6</sup> For a more detailed introduction to Moser's longitudinal study of an urban poor community in Ecuador see Chapter Five.

Where empowerment is granted through participatory processes, positive spin-offs can be noticed for parts of a community. In Pumwani the ever-present NGO St John's Community Centre took the back seat in the early 1990s and gave local youth CBOs and policy groups plenty of leeway and mandate in forming their own projects, defining their course, and recently, even in setting up their own umbrella organisation pushing St John's further away from CBO ventures (respondent SJ 2012). This empowering has given rise to a series of self-help projects in the course of the last decade or so, projects that have helped a number of Pumwani youths in attaining greater (though far from complete) control over their lives, and possibly their futures (respondent BS 2012, respondent UR 2012, respondent KI 2009).

The empowerment focus within participatory processes coincides with the semantic shift in development that Nabeel Hamdi refers to as "dematerialization", focusing away from tangible issues such as shelter and water towards the more ephemeral: rights, governance, and livelihoods (2010, 16). This has also occurred in Pumwani, the case area for the mapping example covered in part II. Earlier focus on building physical structures has shifted to building social structures, power relations, and human resource based attributes. In an interview with an elderly respondent in Pumwani, she lamented this shift, arguing that before she could get a hand-out from St John's Community Centre that could help her mend her roof. "How can I mend my roof with empowerment?", she rhetorically asked (respondent EWT 2012).

The 'dematerialization' of development issues can be seen academia as well, for instance in the special 2012 issue of *Environment and Urbanization* prepared by David Satterthwaite entitled *Mapping, enumerating and surveying informal settlements and cities*. Both the publication and its editor are well known in the development sector. Of the 11 papers on mapping popular settlements presented, "all but one relates to the *engagement* of the residents of these settlements and their own organizations in this mapping and documentation" (Patel and Baptist 2012, 3. *My italics*).

Other examples can be found in practitioner literature on participatory practices in mapping that have been around since the early 1990s. International Institute for Environment and Development (IIED) for instance, have been publishing the series Participatory Learning and Action (PLA) since 1988<sup>7</sup>. This journal discusses participatory issues, and disseminates research findings on matters related to participatory processes. Although mainly focusing on rural agendas, PLA have published research on mapping popular settlements and on urban participation. In PLA we can find examples

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<sup>7</sup> Then called RRA Notes

not only of the shift from rural to urban issues in participatory mapping. Early PLA/RRA issues show how the discourse on participatory mapping could centre on the technical and methodological aspects of participatory mapping in e.g. RRA Notes 14 (1991) with papers such as: *But how does it compare with the REAL data?* (G. J. Gill), *RRA and the analysis of difference* (A. Welbourn), and *The use of the school essay as an RRA technique: a case study from Bong County, Liberia* (J. A. Sutton and B. D'Orr). Later, issues of empowerment connected to participation and mapping were prominent, e.g. in PLA 64 (2011) focussing on youth, participation and governance with papers such as: *Digital mapping: a silver bullet for enhancing youth participation in governance?* (L. Raftree and J. Nkie), *As of now, we are stakeholders in local governance* (Young people from Louga, Senegal with S. M. Fall), and *Local champions: towards transparent, accountable governance in Embakasi, Kenya* (E. Ochieng and C. O. Anyango).

As a final addition to the post-humanistic phase, the digital domain has been fully embraced by the development sector, and as such presents new possibilities for participatory mapping. Starting in the 1990s, it is only during the last few years that digital platforms for mapping and data collection have become so ubiquitous that participatory processes in projects in popular settlements can be successfully implemented. When critically examining digital mapping efforts a number of theoretical and methodological issues arise that add to the discourse on conventional participatory mapping efforts. These are issues related to representation, such as how things are visually represented in digital maps. Issues related to the open, participatory nature of digital mapping tools also arise, such as who gets to participate in mapping, and who are claimed represented through digital mapping. These discussions will be covered in the next chapter, though strictly speaking need not be detached from the period of humanism.

To sum up this section, participatory approaches in popular settlements have existed for several decades. It was not until the shift in development policies in the 1990s, when SLA became popularised by large organisations such as DFID, that participatory mapping became 'standard issue' in development circles. The SLA frameworks favour mappings of socio-economic structures at household levels, with a number of mapping methods and tools available for practitioners and participants in the field. Participatory approaches to mapping have kept in popularity even though SLA was abandoned as official policy by development agencies such as DFID over 10 years ago. Today's participatory mapping approaches are discernable in two ways: participation in mapping (as well as in project development) is seen as one of several strategies for empowering the poor, and participation through digital media has become increasingly important, and is by some hailed as a power leveller – in keeping with strategies for empowerment.

I will now turn to how SLA has influenced specific mapping approaches, before looking at examples of what such approaches offer.

#### MAPPING APPROACHES WITHIN SLA

Several frameworks bring on board participation, livelihoods and household-based issues into urban development. I will here concern myself with how one of these frameworks, SLA has functioned in terms of mapping. Mapping efforts within SLA generally aim towards settlement interventions. The data collected and maps produced all aim towards this. This means that participatory mapping efforts in popular settlements are often highly specific in their scope, utilising tools that seek to make clear possibilities and challenges in a community that can be utilised in for instance plans for physical upgrading. But such a determined approach to mapping, though possibly efficient, dredges up a number of ‘maybes’ that seem to seldom be addressed. Disregard for issues in a community that are not considered important to interventions or upgrading plans, would *possibly* allow mapping efforts to proceed quicker, and would *perhaps* providing clearer results. At the same time, there will exist a number of issues that are *seemingly* unimportant to the mapping processes that could *possibly* have an effect on intervention plans. I would argue that only through a more holistic mapping of communities would it be possible to state with more certainty which issues are of importance, and which are not. Focussing on this problematic, I will here present what kinds of issues SLA based mapping efforts tend to deal with.

#### Redefining how to map (poverty) with SLA

In order to understand the possibilities and deficiencies of (social) mapping provided by SLA, we need to understand a bit more about the model in general. SLA and its derivatives are essentially poverty reduction strategies that include in them baseline theoretical and practical models for a number of highly popular mapping techniques utilised in popular settlements. The approach has been used actively since its inception in the 1990s up until the mid 2000s by a number of influential players in the field of development. DFID, SIDA, Oxfam, CIDA, CARE, UNDP, and the World Bank have all practiced the use of the model and expanded on it in their own ways (Rakodi and Lloyd 2002, loc. 364). Though SLA is wide ranging in its scope, dealing with most all aspects of civil society and policy, my main focus here is to scrutinise more closely the guidelines developed for mapping purposes.

With the humanism period and SLA came a renewed discourse on how to measure poverty. Various players have adapted the theoretical framework to create methods for mapping and analysing poverty. While it was previously measured in terms of consumption expenditure, new arguments in the 1990s claimed that a better measure of people’s standing was their production: what it was they produced, what it could be used for, and how much of it they produced (Moser 2009, loc. 380). Moser argues that poverty is not a place or a thing as is what previous measurement models made it out to be. It is not something you can “fall in and out of”, but it is rather a structural constraint on people’s ability to accumulate wealth (2009, loc. 1282). A number of different types of peoples’ assets or abilities for capital accumulation need to be investigated in order to obtain a more comprehensive picture of the survival strategies of the poor. In SLA production is nominally measured at a household level (Rakodi and Lloyd 2002, 611), although in some cases it would serve better to conduct measurements at an individual, group, or community level, depending on type of production and context (e.g. DFID 1999, 1.3; DFID 2000, 3.1).

#### (SLA and) participatory mapping

Participatory mapping tools are used to uncover assets (possibilities) as well as the problems and issues households and communities face by use of transect walks (connecting issues to place) and interviews (often with detailed guidelines on how to conduct interviews). Stakeholders and actors in or around the community are identified, and issues commonly believed to be at stake in a community are sought clarified and agreed upon through participatory map making and diagraming.

In relation to earlier approaches to mapping popular settlements and their inhabitants, asset mapping, it is argued, allows mappers and participants to focus on what it is that the local community *has*, rather than what it *has not*. Through a positive highlighting of possibilities, household and community assets are considered the building blocks for change. Uncovering assets through participatory mapping is therefore a way to engage in proactive and participatory development of local communities.

In a comparison of how SLA was applied by four major development players: CARE, DFID, Oxfam, and UNDP, a number of core assets were identified as key components for achieving sustainable livelihoods at the household level (Ashley and Carney 1999, 18-19). As financial capital can be scarce in such communities, a number of different types of *household assets* are listed as vital to the wellbeing and *empowerment* of families living in poverty. Collecting data on assets is referred to as *asset mapping*. The report lists

human, social, and economic or financial assets as common to all institutions. In addition DFID, Oxfam, and UNDP have added natural, physical, and on occasion, political capital. Although these are the most common categories of assets used in asset mapping, SLA opens for other kinds of assets to be used. Moser (2009) for instance, distinguishes between different types of financial capital available: financial-productive and that of labour.

### **How assets are mapped through participatory mapping (SLA style)**

A number of SLA tools are used to gain understanding settlements in the larger context of society. Others are used for ‘homing in’ on key stakeholders and issues in the settlement. Some of these tools require expert knowledge and cannot be considered participatory exercises. The tools are: environmental checklists, gender analysis, governance assessment, institutional appraisal, macro-economic analysis, market analysis, participatory poverty assessment techniques, risk assessment, social analysis, stakeholder analysis, strategic conflict assessment, and strategic environmental assessment.

In addition are listed methods for participatory mapping exercises, where different forms of assets (or “capital” in DFID’s language): social, physical, natural, financial, and human are sought understood. These methods include: timelines, seasonal calendars, transect walks, resource maps, social maps, preference rankings, matrix rankings, wealth rankings, and Venn diagrams (DFID 2000, 4.5).

Different techniques for eliciting information through these methods are presented as a step-by-step guide for practitioners: the use of qualitative open-ended interview techniques, quantitative sample surveys, providing discussions on the basics uses and problems with samples etc. (DFID 2000, 4.6-4.7; Dearden et al. 2002, 7.1–7.14).

DFID warn that these tools and methods are not to be considered discrete, but rather as overlapping and need to be used iteratively. Moreover, they need to be treated with a sense of creativity when applied to local contexts, as not all tools are appropriate (2000, 4.3). However, there are few examples given of how this would work in practice. The examples of mappings in Nairobi provided in this chapter indicate that in practice, these tools are often used discretely, not necessarily creatively, and often all at once, resulting in the compartmentalising of large amounts of data. The tools described by DFID (and many more) have become ubiquitous in many participatory mapping exercises such as Participatory Rural Appraisals (PRAs), and in their urban counterpart: Participatory Urban Appraisals (PUAs). What follows are two examples.

### *Kibera Socio-Economic Survey using PUA (2003-4)*

Research International’s socio-economic survey of Kibera (2003-4) is one example of a PUA where 19 SLA-style tools were utilised by the team in order to glean data on social and economic matters. The tools used were:

- 1) Area Mapping, 2) Transect Walk, 3) Village History, 4) Shared Vision, 5) Trend Lines, 6) Seasonal Calendar, 7) Institutional Analysis, 8) Wealth Ranking, 9) Gender Analysis Profile, 10) Household Resource Management Analysis, 11) Community Conflict Management Mechanism, 12) Household Income and/ Expenditure Budgets, 13) Sanitation and Hygiene Assessment, 14) Mobility Mapping, 15) HIV/AIDS Assessment, 16) Existing and Required skills, 17) Livelihood Analysis, 18) Problem/Opportunities Ranking 19) Community Declaration. (Research International 2004, ii)

### *Korogocho Socio-Economic Survey using PUA (2010)*

Another example of PUA tools is UN-HABITAT’s and Participatory Training Promotions Institute’s (PTPI) socio-economic survey of Korogocho, another popular settlement in Nairobi, in 2010. The results of this mapping effort will be reviewed later in the chapter. PTPI utilised a total of 44 PUA tools in Korogocho. These are provided in Appendix A with brief explanations.

### **Other approaches**

Nabeel Hamdi (2010) differentiates between practical, short-term approaches and strategic, long-term approaches to participatory community based planning: Community Action Planning (CAP) and Strategic Action Planning (SAP). Hamdi argues that by first separating and then connecting the two in different stages of a community project, a multi-tiered, holistic project can be implemented without losing sight of the particularities and smaller parts of a project (that may be crucial to the community).

Hamdi’s view is supported by DFID who understand the possibility of losing sight of small-scale issues in the midst of projectteering:

SL analysis is equally important for policy-level and local-level projects. Indeed, since the SL approach emphasises the importance of macro–micro links, the distinction between these two types of projects is likely to become increasingly blurred. Furthermore, even when it is clear from the outset that the primary focus will be on policy or higher-level structural issues, it is important to collect local-level information to feed into the policy-making process. The SL approach stresses outcomes for poor people. These can only be understood through working with poor people themselves. (DFID 2000, 4.2)



CAP attempts to focus to a greater degree on bottom-up processes, and puts “poor people themselves” at the centre of the planning process. CAP methods are easier to implement at a lower level of organisation, and do not necessarily involve or include policy input or output. Due to this the methodology was popularised among stand-alone enterprises, small NGOs and CBOs seeking to address specific issues within communities. On its own CAP works less as a method for overarching societal change, and could be thought of as a method useful for smaller projects.

SAP relates to how *change* can be sustained through an intervention, and how change can be *scaled up* (Hamdi 2010, 138) to “reach more people and address developmental issues” (Jayaratne 2007, 11). This means addressing functional, political, and organisational aspects of a project.

Distinguishing between CAP and SAP processes might also benefit initial data collection exercises in mapping efforts. Distinguishing between CAP and SAP would allow discrete data to be collected, distinguishing between local and large-scale issues before making attempts to map the linkages (or lack thereof) between the macro and the micro.

#### CRITIQUES OF SLA-RELATED MAPPING APPROACHES

In academic and practitioner literature a number of authors have reviewed SLA-inspired mapping approaches. Authors such as Moser, Rakodi, and Carney have contributed substantially to the development of SLA, while at the same time critically examining SLA’s evolution. As such there is no clear or ‘classical’ distinction between practitioners handbooks, toolkits, resources, etc. published by NGOs and aid agencies on the one hand, and academically published material critical to the practitioner literature on the other.

Academics in this field, such as Caroline Moser, are also practitioners in the sense that they are involved in development projects, and are engaged by aid agencies as consultants. Although this duality would require of academic-practitioners that they keep their roles separate, it could also provide valuable insight. As practitioners they get to draw on their academic experience from research projects, and as academics they get to use first-hand data from development projects in their research.

Below are a few of the most commonly held critiques of SLA mapping efforts – critiques that are held by its creators. Some of these issues have been raised in the introduction as critiques of mapping efforts in general. I will here try to expound on these with regards to SLA-related participatory mapping.

#### **The need for operationalization: are SLA mapping methods too rigid, or systematic and comparable?**

A common critique held against SLA and other derivative participatory approaches is that they offer too perfunctory and rigid systems. Beal (2002, loc. 2118-2136) writes of SLA that it has the promise of being a holistic analytical tool for mapping popular settlements, encompassing histories, different scales, social settings etc. But, she warns, the rigidity of the methods also tends to become straitjackets for those seeking to analyse and thoroughly understand an area, providing step-by-step guidelines that are not contextually flexible. The examples drawn from Nairobi in this chapter underscore this point, despite DFID guidelines declaring their intention of the opposite:

The SL framework is not a strait-jacket; it should be applied flexibly, rather than becoming over-codified and obligatory. If flexibility is lost, new insights that the SL approach seems able to provide will most likely be suffocated, and time and resources will be wasted. (DFID 2000, 4.2)

From a mapping point of view, the systematic approach to mapping ‘the unknown’ offered by some participatory mapping techniques is useful. In many ways a systematic is central to what mapping is about: categorisation and compartmentalising, creating order and possible understanding of a complex reality. Participatory mapping methods, especially those derived from SLA are indeed intriguing on this level because they promise to make sense of otherwise seemingly disorganised surroundings, surroundings that are not readily captured by standardised mapping tools.

Due to their shared systematic nature, most attempts at mapping by way of SLA give comparable results. There are some divergences between the different appropriations of SLA by different institutions, but overall there are enough similar features to be able to compare mappings done by e.g. DFID and CARE. This shared *schemata* is a common trait to mapmaking, and is a clear strength in the sense that it allows people from varied backgrounds, academics as well as non professionals to have a shared understanding of what is being mapped, and how to go about mapping.

The systematic approach could allow agencies and NGOs to implement SLA more easily because of the possibilities for administrating and budgeting such work. In addition, the systematic nature of SLA, and the copious literature such as DFID’s *Sustainable Livelihoods Guidance Sheets* (1999-2001) or the more grassroots oriented *Participatory Learning and Action* (PLA notes) published for 25 years by International Institute for Environment and Development (IIED), examining pros and cons, giving advice, provisions of guidelines, etc., means that mapping can be relatively easily executed

by field workers without much prior training. However, the operationality of e.g. DFID's guidelines may sometimes prove to be over-efficient, going too far in suggesting how to investigate a place: the seemingly thorough theoretical backdrop gives an impression of being well covered allowing non-professional mappers to go straight into mapping an area. However, DFID guidelines fall short in problematizing the methods suggested. Thus any mapping done following such guidelines run a real risk of becoming a treadmill exercises that attempts to efficiently map and describe a community, while possibly missing some of the key problems in areas that do not fit the mould. Such tendencies are discernable in some of the example mappings covered later in this chapter.

### **The equating of participation with understanding**

The shift from the overarching policy work of the structural adjustment period to the people oriented livelihoods focus of the humanistic period required that NGOs better understood household and community conditions in settlements. Mapping physical structures in a popular settlement may not require much local assistance, but mapping how physical structures are used, the social fabric that determines usage, and the intersection between the physical and social fabrics are matters that require in-depth understanding of the goings on in a popular settlement (or any settlement for that matter). However, the complexity and 'strangeness' of these goings on meant that 'understanding' was increasingly difficult to obtain in (popular) settlements. Participatory mapping was and is one way in which understanding is sought.

Participation thus ensures a 'teaming up' of local and non-local groups in acquiring such information. In other words, as the drive towards needing to understand popular settlements was met by participatory processes, the resulting logic was that in terms of mapping, *participation* ensures *understanding*. This has become a rather matter-of-factly assumption in development circles, to the point where World Bank Executive Director Caroline Anstey claims that participatory digital mapping tools can create "up-to-date maps of social infrastructure" and "guide development to the places it is needed most" (2012).

This assumes that the maps hold useful information. The mapping examples covered later on in this chapter show that participatory mapping can produce unhelpful information as well. Local knowledge may be corrupted by word of mouth, gossip, interpretations, and inexact dates, as in the case of the *Nairobi Slum Inventory*. External expertise may be misguided by generic questionnaires and exercises that produce data of little value, as in the case of the *Korogocho Socio-Economic Survey*.

Neither is there a guarantee that participation involves the necessary local stakeholders to achieve Anstey's goal of understanding where development is needed the most. A number of important questions need to be asked before commencing with participatory mapping. For instance: *who gets to participate?* Truly democratic results are hard to attain if not all local groups are participating. As pointed out in the next chapter on digital mapping, interventions and projects can easily be "hijacked" by groups claiming to represent a majority. Therefore, participation cannot unequivocally be equated with democracy.

Another important question is: *what is it participants get to participate in?* The participation of user groups in mapping and planning implies that power is being disseminated at levels where there is presumably little power. It implies that decisions made will presumably be more democratic. Further, it implies that the project will presumably better reflect the needs of participant groups. But these are intentions that are difficult to get right. Hamdi (2010, 89-91) points out how many participatory processes do not distribute power effectively, because the participating groups are not included in every step of the project, thus barring them from having any pronounced influence in the process. If participatory processes are to be truly participatory, they require local involvement not only in initial data collection but also in analysis of information, as well as any further deliberations regarding the further developments of a project – increasing not only local involvement, but also local power over developments. Hamdi (2010, 89-90) and others (e.g. Fisher 2001, 17) refer to Arnstein's "ladder of participation" as a way of describing different levels of citizen participation and their ability to control a project. Hamdi shows how distinguishing between CAP and SAP might be one way in which to cope with issues of power and influence in participatory projects (2010, e.g. 87-103).

Holistic frameworks developed in the early 1990s to ensure livelihoods oriented participatory processes did however not only focus on the 'bottom-end' of projecteering. Project structures were sought built where policy based processes met local initiatives to ensure that the focus on creating sustainable livelihoods for the urban poor was anchored at society's top-level both administratively as well as politically. Participation was required at every level.

### **Participatory mapping can be too project-centric**

As most participatory processes aim towards settlement interventions, mapping and analysis of conditions is done with this specific aim in mind. In many situations a precise framing of the intention of the mapping is

unproblematic, and often encouraged. In many fields, ranging from the social sciences to urban planning, knowing *why* and *what for* one collects data is considered to improve one's ability to collect the *right kind* of data. But there is also academic discourse vying for a more open-ended approach to framing projects, constructing hypotheses, collecting data, and analysis. In the case of participatory mapping processes, mapping is often more informed by policy or project, rather than the other way around. The United Nations Food and Agricultural Organisation (FAO) show how CAP analysis of “problems and potentials” (i.e. mapping) is not something one starts out with. Mapping is only commenced on after having made a “decision to hold workshop in a specific location”, to “organise and train facilitation team”, and thereafter “informing the community” (Heny and Seiffert 2003, Part 1). In other words major parts of the project (and the decision that there will in fact be a project or an upgrade) are decided upon *before* any mapping is to take place. This would imply that data collection and analysis are influenced by preconceived notions about what needs to be done in a community (and by extension what problems exist in the community).

In the case of popular settlements, a case can be made for a more holistic approach to mapping. Because there is often little pre-existing or readily available information or data to lean on in such communities, a project-centric mapping process can prove to be too specific, missing important information that would alter findings and recommendations.

### Mapping is only one part of SLA

SLA provides strategies for poverty alleviation and for implementing interventions in settlements. Although it includes mapping tools, SLA is not specifically designed for mapping. In other words, mapping is not the product. It is a stepping-stone towards the implementation of an intervention or a project. The entirety of the process, as envisioned by DFID is depicted in Figure 3.1. This explains why many SLA-induced participatory mappings are not holistic because they are geared towards the achievement of a specific intervention, and will thus map issues that are seen to correlate with this intervention. Mapping is only a small part of SLA, and as such is quickly covered and becomes a check-box assignment that has to be carried out in order to get on with the project at hand. The DFID guidance sheets on methods for conducting analysis state that small-scale projects do not require the same depth of understanding as large-scale ones, and that:

In all cases it is important to avoid spending too much time and resources on information collection, to the detriment of analysis. The many aspects of the SL approach are complex. Without good analysis, even the best data is of little value. (DFID 2000, 4.2)

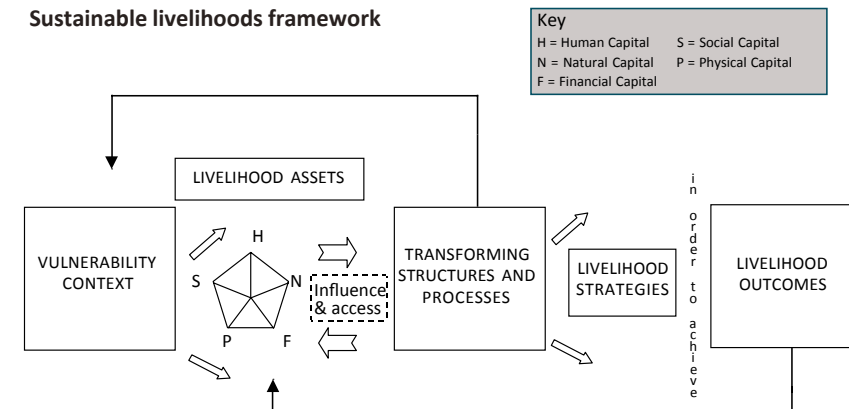


Figure 3.1 The Sustainable Livelihoods Framework (SLA) as defined by DFID (1999, 1.1).

Of the Sustainable Livelihoods Guidance Sheets (DFID 1999-2001), three out of eight documents relate to frameworks (Section 2) and methods (Sections 4.1 and 4.2) for mapping. Other documents relate to wider ranging development issues such as uses of SLA (Section 3), policy reform (Section 5), country level strategies (Section 6), expenditure frameworks (Section 6), rights-based approaches (Section 6), governance (Section 6), sector wide approaches (Section 6), and finally examples of how SLA works in practice (Section 7). Depending on the project, the mapping and analysis phase of a project described in Sections 4.1 - 4.2 would be used as the basis for negotiations between NGOs, local and national governments, other interested parties and (hopefully) representatives from the local community. If we follow the logic of the guidance sheets, these negotiations would centre on issues such as policy, overarching strategies for implementation of project, financing, and scalability.

### Historical analysis

In her longitudinal study in Indio Guyanas in Ecuador between 1978 and 2004, Caroline Moser shows how longevity allows research to be examined in an historical context. She also shows that the social and political structures within which families orient themselves are possible to analyse in greater depth because of the “temporal perspective” of the longitudinal study (2009, loc. 1992). In partial response to the previous critique of SLA mapping efforts being to project-centric, Moser’s study shows issues well beyond the scope of a particular intervention or project are important to incorporate in an SLA-oriented mapping in order to achieve successful interventions.

As presented in Part II of this thesis, it may not be necessary to carry out a longitudinal study in order to provide a useful historical analysis of (or temporal perspectives on) a community. Historical documents relating to Pumwani allow for an in depth study of the development of the community since the 1920s. These are developments that have had decisive impact on the state of affairs in the settlement today.

Such histories cannot be rudimentary or abridged. They need to be studied closely, and ties made to current events. UN-HABITAT have produced flagship documents that in a manner of speaking point to the importance of including historical insight in mapping and spatial analysis:

...urban space (...) has its own history, economy, politics, social dynamics, cultural beat and, above all, human potential. (...) (E)xclusion and marginalization build and reproduce over time (...). Understanding the specific factors behind the urban divide and the way it makes itself felt in any given city is a crucial step for those municipal authorities committed to promoting inclusion. Such understanding can help determine the direction of change and anticipate the institutional and financial requirements for reform. It also establishes a starting point from which future policies and practices can be assessed. (UN-HABITAT 2010, xix)

In other words, it would seem not only that there is recognition of the importance of history as an analytical tool, but also that historical analysis might allow for a better understanding of possible future developments. If UN-HABITAT's publications were to be followed, a proper history of a community will have to be written as an integrated part of participatory mapping exercises.

DFID's SLA guidance sheets however, promote the use of timelines as a way to analyse the historical context of communities (2000, 4.1). Looking at the mapping examples covered in this chapter, this seems to be the preferred praxis in Nairobi. The problem with these historical timelines is that they in general provide little in the way of analysis of the impact of historical events on a community. The timelines are merely a list of dates and unconnected events.

### Scale

More clearly addressed in DFID documentation is the issue of scale. What *scale* is may be more difficult to define than *history*. Scale refers to the tentacle reaches at the household level, or rather, the cultural, political, economic, and social connections from a community into society. The DFID

guidelines clearly state the importance of connecting settlement issues to a larger picture and:

... actively seek to understand the importance of macro–micro links (e.g. the impact on different groups of particular national or regional institutional arrangements or economic trends. (DFID 2000, 4.2)

In other words, the critical eye on the community should shift its scale in order to look at issues anew with a different 'resolution'. In doing so there are multiple tentacle reaches of political, social, cultural, and perhaps most importantly, of an economic nature that can be explored and that on further analysis could prove intrinsic to some of the on-goings in a community.

Although some academically produced material on conditions in Nairobi (e.g. Bujra 1973, Hake 1977, Amis 1983), as well as the example mapping carried out in Part II of this research point to multiple micro-macro links between popular settlements and 'the rest of society', none of the mapping examples reviewed in this chapter address scale to any great extent. As noted in Chapter One, analysis of conditions in Nairobi often tend to depict conditions from a static scale – a birds-eye-view – focussing on overarching socio-economic differences between East and West in the city (e.g. Nevanlinna 1994). Arguably, if scale was a topic of greater importance, more research would possibly pick up on the great socio-economic differences *within* popular settlements such as Pumwani.

Here, SLA-related mapping exercises could be helpful as they are able to pick up on issues of scale. In a socio-economic mapping of Kibera carried out by Research International in 2003 a number of the PUA tools used indicate that the connections residents have to the rest of Nairobi and the country are important. But the tools do not allow for more than a cursory excursion into such matters. No proper analysis is provided of the effects of the social or economic networks that are clearly visible in a place like Kibera. Arguably, such an analysis would be of great importance to a socio-economic participatory mapping.

### Social groups may be masked by household focus

In SLA the core unit most commonly used in mapping and analysis is the household. Yet DFID literature (e.g. 2000, 4.2), as well as other commentators (e.g. Beal 2002, loc. 2164) warn that distinctions between social groups in a community may be obscured by overly focussing on mapping assets at the household level. Important social, political connections, allegiances, power plays, gender imbalance, and economic possibilities

located at an overarching community level may not be picked up if the mapping and subsequent analysis is carried out with a myopic focus on individual households. In other words, there are issues of societal levels to be considered when mapping.

Of the examples provided in this chapter and discussed below the results vary. One example is unable to differentiate between social groups in the community, because it relies on singular sources of information, and provides little in the way of analysis or critique of these sources. Another example fails to accentuate differences between social groups other than the ones the ‘ready-made’ tables provide (e.g. low income, middle income, and high income groups). In a third example the authors were able to identify different social groups, but little was done to discuss such groups’ possible impact on future upgrading.

#### THE EXAMPLES

Having provided a background on the rise of the period of humanism in mapping popular settlements, and having outlined some of the theoretical and methodological challenges associated with especially SLA inspired mapping, in this section I will investigate more thoroughly some examples of (SLA inspired) participatory mappings carried out in Nairobi in the 1990s and 2000s. The critique I provide follows the same logic as the critique of historical mapping effort covered in Chapter Two. The following examples are chosen on the basis that they represent a scope of what participatory mapping can produce (in terms of findings and analysis). These can be roughly divided under three headings: i) the extreme, ii) the check-box exercises, and iii) the holistic. These headings are not categorical. There are nuances and examples of work that fits in-between. Based on research done in Nairobi, the above headings are indicative of three main directions that participatory mapping seems to take.

*The extreme* holds the view that participatory mapping is the *only* way to secure information and gain understanding about popular settlements. They argue that since such settlements function according to a different logic than the “city proper”, and academic knowledge about the city is constrained to the city proper, the only people knowledgeable about conditions in popular settlements are the inhabitants themselves. The extreme mapping is exemplified by Pamoja Trust and Shack/Slum Dwellers International’s *Nairobi Slum Inventory* (2009), with a focus on their chapter on Pumwani/Majengo.

*The check-box exercises* are perfunctory in that they indiscriminately set up an array of participatory exercises, and schematically fill out ready-made forms. Such exercises are mostly found used in methods such as Participatory Urban Appraisals (PUAs) or Rapid Urban Appraisals (RUAs). As the exercises are generic, compiled e.g. in DFID’s *Sustainable Livelihoods Guidance Sheets* (1999-2001) a lot of information is gathered on site, but the resulting analysis may vary in quality. The check-box exercises are exemplified by the 2010 Korogocho Slum Upgrading Project initiated by UN-HABITAT, KIDDP, with technical support from Participatory Training Promotions Institute.

*The holistic* is an example of a more pragmatic approach to participation. Participatory methods and tools are utilised, but only to the extent that they are deemed suitable for the context by the researcher. The data amassed is connected to other sources of data, such as historical sources, official documents, and academic writing in an attempt to provide a more nuanced analysis of conditions. The holistic is exemplified by *Change by Design: building communities through participatory design* (2011), an action planning workshop initiated by Architecture Sans Frontières (ASF) in partnership with the Pamoja Trust, and UN-HABITAT.

In order to better show how the three types of mapping methods differ from one another, as well as critically investigating what kind of results they produce, I have chosen to look at them based on three criteria. Firstly: how is the mapping initiated, and what is its purpose? What kinds of questions are asked as a starting point for the mapping exercises? Secondly: how is the mapping carried out? What tools are used and how do they serve the purpose of the mapping? Are the tools sufficient or useful for type of data collection required in this type of mapping? And finally: what results does the mapping produce? What sort of analysis is carried out to conclude the mapping, and how does this analysis connect to the initial purpose of the mapping or to the tools used to gather data? By structuring the critique along these three inquiries, a number of key issues regarding the nature of the mapping exercises will be made clear. Such a structure will in also be in keeping with Harley’s concerns with regards to the nature of maps (2001, 38-46) – as discussed in the introduction to this thesis.

#### **Review of the extreme: Nairobi Slum Inventory (Makau and Karanja et al. 2009)**

##### *The purpose (the why)*

Pamoja Trust, a Kenyan NGO, and Slum/Shack Dwellers International (SDI), an international housing-rights association, have co-authored this document,

which aims to inform key stakeholders, practitioners, and politicians about the varying conditions in slums and informal settlements in Nairobi. The aim is that this information can be taken into account when discussing future interventions and upgrading in these settlements. More to the point, the document focuses on the lack of amenities and services in Nairobi's settlements as well as addressing more fundamental questions regarding land ownership and access to land (Makau and Karanja et al. 2009, 6-10). In order to do this an impressive 75 settlements and villages in Nairobi have been documented and assessed. The authors believe that if interventions are to succeed they need to be specific to each settlement because the settlements are invariably different from one another: "...for there to be a change, there must be an intervention in each and every slum. An intervention that appreciates each slum's unique set of circumstances and therefore negotiates and crafts a suit that fits." Popular settlements in Nairobi are diverse, and require different approaches in order to be understood and for interventions to succeed.

#### *The tools (the how)*

Although Pamoja Trust/SDI claim to know that "no slum is exactly like any other", they still generalise Nairobi slums as being dirty, badly maintained, with poor infrastructure, and with little or no secure tenure: "wander down twisted, slippery, narrow aisles, jump over open sewers, take in the smells of one-year old garbage, taste stewed chicken beaks or roasted fish gills, and share in the fear of being bulldozed in the middle of the night" (Makau and Karanja et al. 2009, 6). The tools used by the team also reinforce this impression: the inventory lists and breaks down "unique" slums in a uniform fashion, describing them through the same sets of headings: *Land, Population Size, Housing, Services, and Economic Activities*. Unfortunately, adhering to this structure in each case restricts the possibilities for performing "settlement-specific" mappings. Only in a few cases do other headings such as *eviction threats* and *community-lead upgrading* appear. The automated listing of facts under each heading is perhaps in keeping with an "inventory", but the lack of analytical prowess hinders the authors from achieving their objective of exploring "settlement-unique variables (...) to inform (...) upgrading" (2009, 10).

Despite SLA or PUA tools not having been directly utilised in the mapping, the document clearly applies an SLA-based approach by engaging local residents in the mapping and documentation of conditions in the settlement. Though the documentation does not supply any overview of questions asked during interviews with locals, Pamoja Trust/SDI have followed a methodology in obtaining information:

...at the heart of this inventory are narratives recorded by the Nairobi informal settlements residents (...). Assisted by Pamoja Trust officers, teams of men, women and youth collected information from all of the city's informal communities. Notably, every settlement has a "founding father(s)" oftentimes living in the settlement since its formation. These key informants would then lead teams to other village elders to complete the settlement's history. (Makau and Karanja et al. 2009, 8)

Although interviews with locals are not exclusive to SLA, the approach Pamoja Trust/SDI describe is in keeping with the bottom up and participatory approaches central to SLA, and shows a commitment to putting locals and their stories at the centre of interventions, and is therefore at the outset a participatory form of mapping. However, by restricting interviews to "founding fathers", a very limited form of participation is achieved. Not only does this limit participation, but also quite possibly effects the results of the data collection. This is made evident by comparing Pamoja Trust/SDI's data from Majengo in Pumwani (Makau and Karanja et al. 2009, 118-119) with the data collection carried out in relation to this thesis (presented in depth in Chapters Six - Eight). The data presented by Pamoja Trust/SDI does not correlate with the view of multiple respondents in the mapping carried out in this thesis, suggesting that the tools in Pamoja Trust/SDI's mapping have not been able to capture a breadth of viewpoints despite claims of "seeing the picture the way the slum dwellers see it" (2009, 3).

#### *The results (the what)*

By comparing Pamoja Trust/SDI's findings in Pumwani with historical research and qualitative interviews conducted in relation to this thesis, a substantial amount of the information gathered by Pamoja Trust/SDI in Pumwani appears inaccurate. This is not in itself a problem, as the document clearly states that the inventory is "not the entire picture" (Makau and Karanja et al. 2009, 4), and that the data represents the *view* of residents. But as the authors at the same time aim to make this documentation a "lobby tool (...) to address access to land, adequate housing, and quality service provision" (2009, 10), the possible ramifications of erroneous information need to be looked into.

I have illustrated this claim in Appendix B where I highlight short sections of the text, comparing the information gathered through Pamoja Trust/SDI's approach to (mostly) primary source material. The primary sources are in many cases Council Minutes from the historical time periods in question.

The examples highlighted in Appendix B show the possible detrimental results when the tools used to gather data are not in line with the intended

purpose of the mapping. The above need to be seen in light of the authors decision not to “derive variables from professional, academic or technical strains” (Makau and Karanja et al. 2009, 4), and that the information in this inventory solely relies on a limited number of local resident respondents. In this the report strays from most other mapping work aligned with the humanistic trend, as SLA guidelines clearly point to the usefulness of cross-disciplinary analysis provided by specialists from both social- and technical sciences (DFID 2000, 4.1-4.2).

The disregard for academic input exemplified by the *Nairobi Slum Inventory* could possibly be attributed to the fear of top-down approaches to poverty and development represented by the ‘polarization’ of approaches to poverty reduction during the 1990s (Moser 2009, loc. 373). However, as expertly exemplified by of Moser’s own analysis of conditions in an urban poor community in Indio Guayas, Ecuador, or in Bujra’s analysis of ownership structures in Pumwani (1972), an academic analysis need not be representative of a top-down paternalism, but rather provide insight to bottom-up oriented approaches.

Because the purpose of the inventory is amongst others to provide “discussions on different variables, the history of the settlements and how they determine the upgradability and location” (Makau and Karanja et al. 2009, 10), one would assume that the histories provided for each settlement would segue into an analysis of what the different histories *mean* for the further development of the settlements. Sadly, such analysis is almost entirely missing. In the case of Majengo in Pumwani, the one attempt at analysing the implications of historical issues and land tenure (“The land here is private and was allocated to different individuals shortly after independence. The majority of the owners, however, do not possess any legal document to the claim that they own the said parcels of land” (2009, 118)) falls short as the data is erroneous.

The quality of the work is perhaps most grievous in the sense that Pamoja Trust and Shack/Slum Dwellers International are both highly respected actors in the urban development field. Pamoja Trust was borne out of the “anti-evictions movement that arose and grew in Kenya in late 1990s and early 2000” (Pamoja Trust 2013). They collaborate closely with *Muungano wa Wanavijiji* a federation supporting over 30 000 residents in 400 settlements across Kenya (Pamoja Trust 2013). Pamoja Trust, together with COOPI, an Italian NGO, were the architects behind the Huruma redevelopment scheme<sup>8</sup>, where roughly 250 households have been provided new homes (IRIN 2010) through a series of highly successful participatory processes involving

savings groups, designs, and construction (respondent PT 2009). The Huruma project is frequently visited by NGOs and agencies interested in ‘best practice’ examples of participatory design.

SDI is one of the largest global interest organisations for shack and slum dwellers. Established in 1996 its objectives closely resemble SLA when aiming “for the urban poor to be at the center of strategies for urban development” (SDI 2013). SDI are heavily supported by various donor agencies, and are a respected voice in matters of urban poverty. When two such organisations produce a document such as the *Nairobi Slum Inventory*, they will be heard, and their mapping and analysis will be taken seriously. Perhaps it will even be acted upon.

### **Review of the *check-box exercise: Korogocho socio-economic analysis (Gathuthi et al. 2010) and Korogocho situation analysis (Chiti 2010)***

#### *The purpose (the why)*

One of the most recent mapping exercises taking place in Nairobi is by UN-HABITAT with partners in 2010 in Korogocho, located in the northeastern parts of Nairobi. Korogocho was Although the UN-HABITAT has dubbed their contribution a “situation analysis”, this project is for all intents and purposes a mapping. So is the socio-economic analysis carried out by the Participatory Training Promotions Institute, a group specializing in participatory mapping techniques. I have chosen to review these works as one, seeing as how they relate to the same project and utilise many of the same tools and findings.

The mapping exercises were carried out by a team of planners, involving “a series of surveys (...) geared at providing background data to assist a variety of stakeholders to reach a consensus on the existing situation in order to develop a sustainable integrated plan” (KIDDP 2010, 5). The programme itself “aims to improve the living conditions of the Korogocho residents through an holistic and integrated approach that promotes the active involvement of all stakeholders”, based on five thematic pillars: *improving physical conditions, social conditions, economic conditions, institutional capacity, and environmental conditions* (KIDDP 2010, 6). The planning process for the project was initiated through two workshops in the community during 2009, which produced: “a roadmap for the development of the settlement and a physical advisory plan on which improvements on security of tenure are based as well as basic infrastructures/services designed and delivered” (2010, 9).

<sup>8</sup> Huruma is a settlement in Nairobi.

*The tools (the how)*

Seen as one, these documents highlight the range of mapping tools available to the UN-HABITAT and Participatory Training Promotions Institute when carrying out *PSUP – Participatory Slum Upgrading*, or *PUA – Participatory Urban Appraisal*. (The *upgrading* being connected to projects and the *appraisal* being connected to data collection). In the case of the UN-HABITAT lead situation analysis 44 tools were implemented in partnership with the local community: “(T)he comprehensive situational analysis included a listening survey, structure numbering, socio-economic survey and an enumeration survey. The listening survey was undertaken by a team of social workers under the guidance of selected planners. It involved field observations, ad hoc informal interviews in all the eight villages” (KIDDP 2010, 5). The maps and statistics from Korogocho were collected in a socio-economic survey involving 360 people from within the community, 76 of which were especially trained as enumerators and facilitators (Chiti 2010, 3). This training concentrates on fulfilling the mapping and data collection exercises as dictated by the PUAs (see Appendix A).

*The results (the what)*

In June 2009 Kenyan K24 TV highlighted the tension surrounding the Korogocho Slum Upgrading Programme. The story covers a public address to residents in Korogocho by the Deputy Prime Minister Muslia Mudavadi, Italian Ambassador to Kenya Pierandrea Magistrati, Mayor of Nairobi Godfrey Majiwa, and area MP Elisabeth Ongoro, and marks “the launch of yet another slum upgrading program and the beginning of another controversy” (K24 TV 2009).

In the news clip a number of angry residents show up at the event to protest a project that they see as potentially undermining residents’ authority concerning their claim to the land in Korogocho. One of the interviewed protesters claims they do not want the government to upgrade the slum, and that residents should be left to upgrade their houses by themselves. Another protester claims that some politicians want to take advantage of the upgrading scheme as a way of accumulating votes. He further holds that residents want to be given documents for ownership of the land and rebuild their houses by themselves. In response the MP tells them that it is public land and asks them to be on the lookout for those who would want to benefit economically from the slum upgrading programme. Addressing the crowd, the mayor stresses that the programme will only benefit Korogocho residents and not outsiders. He cautions them against bringing in relatives from outside with the intention of claiming houses. The deputy prime minister tells the crowd that residents will be involved in every step of this project in order to ensure transparency.

The news clip ends by concluding that despite the speeches made by the politicians, the residents are still not satisfied: they want total ownership of the land and want to build the houses by themselves.

The public address and the protests covered by K24 TV took place during the formal opening of a footbridge linking Korogocho to Dandora, a housing area originally built from 1977 as a World Bank funded social housing scheme. The establishment of the footbridge marked the start of the upgrading scheme and provided a tangible, useful physical upgrade, as Dandora is the workplace for many people living in Korogocho, who had to cross the Nairobi River every day on perilous pipelines prior to the construction of the footbridge. In addition the bridge, as a unifying element and metaphorical link, can be construed as a powerful symbolic gesture. A pamphlet was later published by the Kenya-Italy Debt for Development Program (KIDDP 2010) documenting amongst others the opening of the footbridge (2010, 4-5; 12; 36). The demonstrating crowds that were present, and their points of view are, however, not included. Neither are they included in the subsequent mappings that were carried out despite the fact that they were “geared at (...) develop(ing) a sustainable integrated plan” (2010, 5).

In the socio-economic analysis that was carried out by researchers from the Participatory Trainings and Promotions Institute issues regarding ownership in Korogocho were summarised as:

A majority (68%) of the respondents reported being tenants, while slightly more than a quarter (26%) indicated living in their own structures. A majority (66%) indicated that they considered their room size not adequate at all. Again, a majority (61%) said they only occupied one room. Those who occupied 2 rooms accounted for 26%, while 9% occupied three rooms. On average one room in the village is occupied by 3.1 persons, implying congestion as the rooms are only 10 by 10 feet in area. One main housing problem faced by the household emerged as congestion, poor roofing, high rent and poor walls. This is merely to say the structures are not good enough for human habitation. On land ownership, 13% said they owned the land, 46% said Central government owned it, while 38% said their landlord owned the land where their structure stood. (Gathuthi et al. 2010, 15)

The socio-economic survey does however come close to the heart of the matter when pointing to the following statistics (and reprimand):

The issue of land tenure in Korogocho is sensitive and as evidenced by this finding, there are generally two groups of people with completely divergent opinions. One says the land is owned by the community (51%) while the other says it is owned by the Government (46%). Thus, it is imperative the community be educated on the correct position on land tenure. (Gathuthi et al. 2010, 153)



It is held that residents are to be involved in “every step of this project”, still it seems no one has asked the residents about their wishes and goals in terms of ownership of structures. The socio-economic survey (Gathuthi et al. 2010, 153) hints at this being a topic for discussion in household interviews, but no evidence is given that the issue was discussed thoroughly. Nor is there statistical information on the proclivities of residents concerning the matter of ownership and upgrading (despite numerous other statistics). In fact, the demonstration documented by K24 TV seems to be the only evidence that there is contention on a matter that should have been of paramount importance to drawing up a “holistic and integrated approach that promotes the active involvement of all stakeholders”.

Instead of providing context specific analysis highlighting on-going tensions in the area, the socio-economic survey offers a social analysis true to the schematic nature of SLA mapping: social stratification in Korogocho is divided into *high income*, *middle income*, and *low income*. The conclusions is that 1) those with a high income have more material wealth than lower income groups, and that 2) those with a low income are less able to pay their bills (Gathuthi et al 2010, 70-73). Such conclusions are telling of how pre-structured systems for analysis may provide uninformative results. More specifically, the check-box exercise as presented here seems unable to capture the complexity of a settlement. Nor does it capture crucial issues that residents themselves believe are pivotal to developing a “sustainable integrated plan” (KIDDP 2010, 5).

In this example the report favours the use of quantitative data as a way to say something qualitatively about conditions in a settlement. But as DFID point out in their SLA guidelines, all mapping tools need to be applied suitably for the context and project at hand (DFID 2000, 4.2). The use of numbers and statistical data is common to many reports, for instance UN-HABITAT’s *The State of African Cities* (2011), where numbers are collected continent wide. Another example is Davis (2006) who presents numbers and statistics on a global scale. In these two publications the numbers and statistics have a purpose: to ‘prove’ or ‘disprove’ progress through comparing numbers. In the case of Gathuthi et al. however, the information has no comparative value. Their use is more reminiscent of the early mapping exercises presented in Chapter Two (e.g. Simpson, Feetham, Brumage, and Hosking), where the chief aim of the mapping was to present statistics on settlements of which nothing was previously known, as the settlements were in the process of being created. But in these reports the chosen mapping method connected well with policies at the time, which instructed a *lassies faire* approach towards African urban developments.

In the case of Gathuthi et al. then, not only are some of the mapping approaches methodically uninformative. They also seem to be out of tune with prevailing development policies, which demand much more intervention-usable, resident oriented investigations. As noted in Chapter One, Black holds that mapping by non-professionals is becoming increasingly popular, “but with little real interest in maps or knowledge about them (...) they are often unaware of the lacunae in, and the problems of depicting, their data” (1997, 104-105). Although the check-box exercises exemplified here and below are not facilitated by non-professionals, there is undoubtedly an unquestioning use of mapping tools. This would seem to be indicative of a lack of discussion regarding what tools to use for what purpose, and in which contexts they may or may not be appropriate.

#### **Other check-box exercises**

Other examples of similar check-box exercises in Nairobi are e.g. Research International’s 2003 *Kibera Socio-economic survey*, St John’s 2005 *PUA of Pumwani* (Muiruri and Gatei et al.), and UN-HABITAT’s 2006 *Nairobi Urban Sector Profile* (da Cruz et al.).

The term ‘check-box exercise’ was coined after interviews with Research International staff conducted for this thesis. Several of the organisations and firms working in settlements like Kibera are commissioned by larger international agencies. As such they have been given clear mandates, deadlines, and economic limitations to what they are supposed to engage with. Research International had been commissioned to carry out the socio-economic survey on behalf of UN-HABITAT and the Kenya Slum Upgrading Program (KENSUP). Interviewed Research International staff commented about the quality (and importance) of their work in Kibera that “it felt like we were carrying out a tick-the-box exercise” (respondent RI 2009).

St John’s PUA (Muiruri and Gatei et al 2005) may be representative of a synthesis between a check-box exercise and a holistic exercise, not by virtue of the mapping approach itself, but arguably because of the pre-existing, intimate knowledge St John’s has of Pumwani. The PUA builds on findings from a baseline study commissioned by St John’s carried out in 1989 (Onyango 1989). The result has been, according to interviews conducted with heads at St John’s that the Centre was able to re-orient their activities and provide more suitable assistance for a range of groups. In hindsight this has had a positive effect on the community when assessing the impact of the non-formal primary school, the youth programs and its many derivatives, as well as the vocational training for women (and later men). The positive

effects of St John's re-orientation of programmes was corroborated by most all respondents in interviews in Pumwani in 2011-2012.

According to St John's leadership the re-orientation of programmes came as a direct result of the baseline study and the PUA mapping. Recommendations in the baseline study are quite specific, and are divided along group lines (gender and age), allowing for specific needs of children being addressed in a different way than for youths, and for women bread earners. Though these recommendations may certainly have triggered the re-structuring of St John's, there is little in the documentation provided to connect the mapping results in either the base line study or the PUA to the recommendations.

The thematic structure of the mappings (spatial information, time-related data, and people related information) and the methods applied (e.g. community sketch maps, household interviews, and transect walks), though in accordance with PUA methodology, cannot be directly linked to discussions regarding restructuring at St John's. Neither can the mappings' data collections or analyses be said to directly prompt a restructuring of St John's, as they seem unable to grasp issues central to the community: the role of women in Pumwani is never discussed despite the relatively large proportion of female headed households. Neither is the relation between Swahili culture and the community acknowledged. The consultancy-produced baseline study concludes that "most people in Pumwani hardly belong to social groups" (Onyango 1989, 78). This is contrary to findings by McVicar (1969), Bujra (1972), as well as mapping results in Part II, where social groups and the differentiation between them is pivotal to the 'inner workings' of the community.

Rather than taking direct queues from the baseline study, St John's ability to successfully restructure their organisation and programmes might stem from the longevity of the organisation in Pumwani. The roots of the organisation in the community can be traced to the 1920s, the organisation's intimate knowledge and follow up of residents is a more likely reason for the re-orientation of programmes – rather than it being the result of perfunctory mapping exercises.

### **Review of the holistic: Change by Design (French et al. 2011)**

#### *The purpose (the why)*

This mapping project, carried out by ASF and Pamoja Trust in 2011 sets an ambitious goal of "improving slum areas through addressing both the root causes of poverty as well as the physical environmental conditions" (French et al. 2011, 9). The pretext for the approach adopted in this mapping

example is a concern regarding the constant repetition of past mistakes of slum upgrading: "mass produced, expensive, 'top-down', turn-key housing solutions into which slum dwellers were relocated, and where life became more difficult for the people that the projects were supposed to serve", and that: "where it existed, 'participation' in these projects was essentially nothing more than consultation of previously made professional upgrading plans and decisions" (2011, 9).

The methodology of the mapping had previously been carried out in Brazil, providing the opportunity for making observations regarding the reiteration and re-application of the methods and tools in a different urban context. Despite the possibilities provided in ASF's documentation for re-applying the method elsewhere, the authors warn that the approach is "certainly not a panacea to the challenge of slums. Nor is it a guarantee for achieving the full realisation of the right to adequate housing" (French et al. 2011, 10).

The ultimate aim of the mapping and subsequent workshops was to create a platform from which Pamoja Trust and local residents could start to design a community lead upgrading initiative in Mashimoni, a part of Mathare Valley, and through the process provide architecture and planning students and practitioners with insight into participatory design issues<sup>9</sup>.

#### *The tools (the how)*

The participatory mapping exercises carried out in Mashimoni were organised under three main activities: *institutional mapping*, *community mapping*, and *mapping of dwellings*. The results of these three exercises were thereafter reviewed together in workshops examining what ASF call a *portfolio of options*.

The tools utilised in the mapping exercises did not enable participants to count the number of inhabitants or number of structures in the neighbourhood, nor did they seek to make timelines of the history of the settlement. The tools did however allow participants to better understand social structures, systems of cohesion, institutional frameworks, and the possible effects of policy changes on the settlement.

Instead of producing quantitative data sheets from which the design for new housing schemes could be drawn, the planners and participants in the mapping exercises in Mashimoni were able – through *institutional mapping* – to better understand "the policies and planning procedures shaping the

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<sup>9</sup> There are also other places called Mashimoni in popular settlements in Kenya, e.g. Kibera and Pumwani in Nairobi, as well as in Mombasa and Kisumu.

opportunities for participatory upgrading processes in Mashimoni” (French et al. 2011, 34). The “multitude of uncoordinated” local networks were mapped, the possible effects of the new constitution and policy documents were investigated, different stakeholders – both non governmental and governmental – were identified, and people’s ability to acquire tenure or leasehold were looked into.

Through the *community mapping*, the participants sought to map the current situation in Mashimoni to uncover vulnerabilities and opportunities connected to existing social and spatial structures, in addition to infrastructures. Through this mapping, the participants sought not only to uncover these structures, but also to “bridge societal processes with the morphological characteristics of space”, and to “explore the meaning of community” in a place that is “far from homogenous” (French et al. 2011, 50).

And in order to perform an analysis of *dwellings* the participants documented the current conditions of housing in Mashimoni, and a subsequent participatory ‘dreaming’ of “what upgraded dwellings could look like” (French et al. 2011, 98). This was followed by exercises aimed at uncovering possible bridges between the existing housing stock and the ‘dreams’. A set of building typologies were developed in the basis of this to initiate discussions on the impact of such upgrades on the community, e.g. what would a residential ‘tower’ provide for the community, and what might be lost as a result of such a development?

Although not truly addressing “the root causes of poverty” (French et al. 2011, 9), this example of holistic participatory mapping shows that the methods and tools applied by ASF, Pamoja Trust, and local participants were in keeping with some of the other aims of the mapping such as: improving the understanding of the complexity of urban informal settlements, attempting to move away from top-down, ‘turn-key’ housing solutions, and to initiate participation beyond consultation.

#### *The results (the what)*

Each of the three initial chapters in *Change by Design* on institutional frameworks, community, and dwellings hold conclusions and summaries of results on their own: the institutional results were e.g. that through the new constitution, residents could now apply for leasehold as a community. The community results were the identification of; key groups such as children, but also other examples of individuals representing social typologies; key spaces such as the riverside; and key issues such as waste management. These findings were brought back to a wider selection of community

representatives for discussion and verification. In the case of dwellings, the mappers found that housing in Mashimoni is “far from homogenous”, with a variety of quality, size and cost, but that a “complex socio-physical web” interconnects the houses despite the variations (French et al. 2011,138). Also, the importance of front porch trade was investigated through the mapping exercises.

Most of the final results are found in the portfolio of options that wraps up the mappings and workshops. This is an important part of the document that draws together the results from the three prior mapping exercises in attempt to come to a consensus among residents and stakeholders regarding the upgrading of Mashimoni. According to the authors the residents discussed “the benefits and disadvantages of each option”, from the “kit of parts” (French et al. 2011, 146). This was done in five separate workshop sessions, and consensus was gained with respect to 9 topics; *housing*, what typology is best suited for Mashimoni; *streets*, what upgrades should be carried out; *procurement*, how should the process of construction proceed; *infrastructure*, what are the basic requirements and upgrades needed; *land*, what kind of ownership or lease system can possibly be put in place; *community representation*, who is to represent the community, and what system of representation should be chosen; *finance*, how is the project to be paid for; and finally *post-build management*, how is the upkeep of structures to be carried out after the project is done (2011, 158-163)?

In other words the project left the participating community not with a finished project, but with a ‘road map’ for how to go about creating a project. Through the data and the analysis, and a consensus on the what the ‘road map’ should look like, the community is better able to negotiate with interest groups and other stakeholders in the event of an upgrade scheme, and to better impact any future intervention in the area. More so, I would argue, than in the case of the extreme and check-box approaches.

Not only did the holistic mapping provide participating residents with a platform to initiate discussions with outside entities. It also made it possible for the community to initiate parts of the interventions on their own. If this were to happen it might provide a tangible shift in the dependency on NGOs that local communities can develop. If interventions were community executed, one could speculate that the local ownership to the process would be heightened, and that locally based institutions could develop to take the place of external NGOs in the supervision of the redevelopment – whatever shape it may take.

To sum up, this example of a holistic mapping exercise seems capable of achieving it’s intended aim of “developing a settlement upgrading plan

for Mashimoni”, and gives plausible answers to questions of how to build social capital, how to move from enumeration to design, and how to reach consensus among residents on issues that go beyond “addressing their physical setting” (French et al. 2011, 21).

The project as a whole was carried out in 2 weeks, indicating that a contextually well-adapted method and critical application of participatory tools can provide substantial results in a very limited time. This supports my previous claim that it may not be necessary to initiate a longevity study of a community (as exemplified by Moser 2009) in order to get substantial results. Given more time, however, it would have been interesting to see the three initial mapping exercises (institutional, community, and dwelling) be executed after one another – one building on the other – instead of being carried out simultaneously. This would perhaps have allowed for better utilisation of data and analysis, where each exercise was able to utilise the knowledgebase built up by the previous exercise.

## CONCLUSIONS

Guidelines for mapping settlements based on SLA and its spin-offs compromise a large body of methods, techniques, and tools for mapping and for how to go about participatory interventions in popular settlements in the South. With SLA, poverty can be addressed through the application of a method, such as through DFID’s *Sustainable Livelihoods Guidance Sheets*. But SLA can also allow for ‘stand-alone’ techniques or tools to be applied by practitioners, where local participants are asked to draw up e.g. *seasonal calendars* of their use of their neighbourhoods. This not only makes SLA a complex framework to understand, but also caters for a variety of different uses, and results. Based on a revision of mainly examples from Nairobi, some of the results of these approaches can be summed up as follows:

Though the framework as a whole is thorough, it is also complex given the nature of popular settlements. Additional complexity comes from the fact that the SLA framework is mainly geared towards projecteering – the creation and execution of projects. None of the frameworks reviewed deal *exclusively* with issues of mapping, but are more about tackling overall societal change through very specific projects and interventions. The analysis provided in this chapter is of the frameworks’ mapping methods and does not provide insight into how SLA and other participatory approaches function in relation to e.g. poverty alleviation. Since the frameworks and guidelines are not exclusively mapping oriented, and since they often move rapidly into projecteering, there is reason to question this rapidity which often leads to rushed and cursory mapping efforts.

Despite claims to the opposite, the guidelines and frameworks are rather rigid in their approach to popular settlements, and how to go about understanding them. This rigidity is positive in the sense that it allows for easier follow up (and follow through) by institutions, and that it provides for comparable mapping outputs. Still, if the guidelines provided by DFID and CARE are scrutinised more closely, they recommend a less rigid, more contextually adaptable approach. However, as shown through the critique provided in this chapter, as well as through the review of mapping examples, the brunt of the guidelines provide step-by-step instructions for how to map, effectively drowning out the message of flexibility.

More importantly, perhaps, this seriously questions the usefulness or even applicability of the categories and the social theory behind SLA mapping methods. Questions regarding the appropriate nature of the constructed categorisation provided by the SLA (the focus on the household, mapping of assets) is discussed in supporting, academically based literature (Beal 2002, Solesbury 2003, Rakodi 2008, Clark and Carney 2008), as well as in sociological theory (issues of class, and definition of categories and social typologies related to class in e.g. Edgell 1997), but is not discussed in the handbooks themselves. Barring the discussions of whether or not SLA’s particular categorical approach to mapping is useful, the fact that the guidelines do not open up for discussions on the construction of SLA will potentially leave many mappers unaware of the theoretical backdrop on which they are basing their investigations. In the early 2000s DFID discontinued their use of SLA. The discontinuation meant that there is even less opportunity for critical discussions regarding these issues today, despite participatory mapping methods continuing to remain popular among practitioners.

On a more mundane note, questions of resources such as time and money come into play, even with the most rigorous of mapping methodologies. Proper follow up of mapping efforts, and thorough analysis of data collections require resources that often lay well beyond the budgeting of NGOs or CBOs involved in the mapping exercises. Thus, on the one hand, the rigidity and step-by-step approach to mapping popular settlements provided by SLA-based models provides comfort in the sense that a measurable output can be expected from mapping efforts. On the other hand, the somewhat efficient nature of the guidelines means that mappings easily become hurried, providing results that hold little in the way of analytical power.

Based on the above issues I have identified three different approaches to participatory mapping: *the extreme the check-box exercise*, and *the holistic*. All three can be seen as legitimate responses to the historical, political, and

systemic forces that have shaped ideas of what participatory mapping – and projects – should be. Of the three, however, the extreme and the check-box exercises come short in achieving acceptable results. The holistic approach, due to its pragmatic use of participatory approaches and varying use of methods based on context, stands out as the most sustainable approach to participatory mapping. This approach would be the most suitable to build on in further investigations of mapping methods for popular settlements.

In light of the foregoing discussions in this thesis; the critical theories evaluating mapping, the evaluation of the history of mapping efforts in popular settlements in Nairobi, and the review of current participatory mapping approaches, I now turn to the latest addition to mapping in popular settlements: digital mapping efforts. As made clear in the next chapter there is undeniably a lot of potential in digital mapping efforts, especially when seen in conjuncture with participatory approaches such as the ones covered in this chapter. Although the digital platforms offered are quite new, they have been gaining serious support, also in Nairobi. Such platforms tend to spring out of independent movements. But there is growing impetus from a number of large-scale institutions such as the World Bank and UN-HABITAT to further the use of digital tools in combination with participatory methods in work in popular settlements. I would argue that it is therefore appropriate to evaluate such digital mapping efforts in popular settlements in light of the specific critique provided in this thesis.

## 4. Digital Mapping Efforts

### SOCIAL MEDIA-BASED MAPPING TOOLS AND URBAN DEVELOPMENT IN NAIROBI

#### Introduction

None of the participatory mapping exercises covered in the previous chapter need to be carried out digitally. Barring the critique of the various tools and methods exemplified, there is nothing un-functional about their analogue nature. The analogue nature of participatory mapping in popular settlements has made sense in places where people have not taken part in a ‘digital revolution’. But now that more and more residents in popular settlements are making the shift to the digital domain, with mobile phones, e-mails, and Facebook accounts, and with continually improving access to online services, digital mapping platforms are becoming increasingly popular in development circles as a means for carrying out participatory mapping exercises.

But these digital mapping platforms are not merely digital renditions of the methods and tools covered in the previous chapter. Rather, they are new forms of mapping, utilising social media, mobile technology, crowdsourced data, user participation, and communal editing. Having spread prolifically around the world, these forms of mapping utilise easily accessible digital technologies to efficiently share and collaborate on the drawing of maps and information disseminated and embedded within these maps. By catering for such things as multiple authors, open distribution, and near to real-time updates, these digital tools boast not only a shift away from standardised, static, expert lead mapping ventures of the kind reviewed in Chapter Two. They also shift away from non-digital participatory mapping efforts covered in the previous chapter. Such shifts imply new kinds of uses of maps and the information embedded within them, something that can challenge common opinion about what popular settlements are, and can address settlement residents’ rights to the city.

In this chapter I will look at the use of these new social media-based mapping tools by *Map Kibera* in Kibera, one of the largest popular (or urban poor) settlements in Nairobi, Kenya. I will investigate Map Kibera's use of the tool base, and the purpose(s) it serves. Through the example of Map Kibera I wish to question the validity of claims made of the increased objectivity of data afforded by these new mapping tools, while attempting to unveil some of the actual contributions these tools might provide for popular settlements and urban development.

For the purpose of this thesis I will use what I term *social media-based mapping* to signify any digital mapping platforms or systems that rely on local community involvement; that crowdsource information and data from the general public by use of SMS, tweets, e-mail or other digital messaging; and that utilise a baseline map open to editing by the general public.

### Outline of chapter

The first section of this chapter briefly explains the emergence of new social-media based mapping tools, and offers insight into a series of critiques held against conventional map-making with focus on the global South.

The second section introduces the case of Map Kibera, their setting and the premises for their work, describing how they have made use of social media-based mapping tools.

Then an analysis is offered, seeking to understand in what ways the tools used by Map Kibera are different to conventional mapping tools in terms of how they are deployed in Kibera, and what data they produce. Technical and methodological aspects, as well as social and political aspects of the mapping tools are scrutinised with regards to the implications of these new mapping methods; what do they claim to change; who's agenda do they serve; and what are potential pitfalls? The analysis offered attempts to show that the maps produced by new social media-based mapping tools are not fundamentally different from the conventional maps they seeks to distance themselves from.

Finally, issues pertaining to urbanism are raised by gauging Map Kibera's efforts in relation to the urban development of Nairobi. Arguments are made questioning Map Kibera's and OpenStreetMap's claim of increased objectivity through use of social media-based mapping tools. Arguments are made *for* Map Kibera's production of 'subversive' maps that counter historically inherited views of the urban poor and their neighbourhoods, maps that can be helpful to large, marginalised groups of urban residents in asserting their inherent right to their own city.

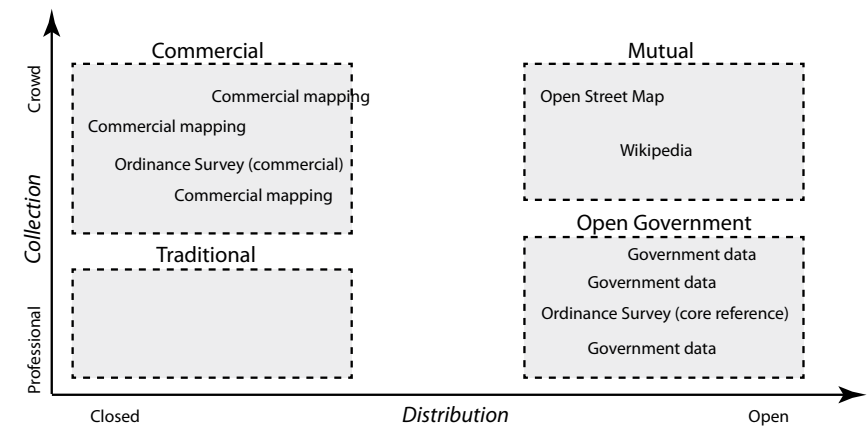


Figure 4.1 An idealised representation of the future of mapmaking, from Peter Miller, ITO World (2010).

### MAPPING POPULAR SETTLEMENTS AND DIGITAL DEVELOPMENTS

#### The emergence of social-media based mapping

Digital technology, especially through online resources, offers an 'opening up' and 'de-expertising' of mapmaking. Online maps are increasingly characterised by two traits, which they share with other online knowledge resources such as Wikipedia: 1) maps are being made by non-professionals, and 2) maps have multiple authorships. While Monmonier (1996), Black (1997), and MacEachren (2004) question the wisdom of letting 'everyone' make their own maps, Wood argues that it is the 'arrogance of the expert' that lets him think that he can make good maps of situations and places he knows little about (1992, 193).

Peter Miller of ITO World has examined current shifts in mapmaking (Figure 4.1), arguing that though most mapmaking was previously commercial or governmental data collected by professionals and distributed through limited channels, mapmaking has since diversified to cater for a number of requirements, and has gained more diverse authorship. Miller holds that 'new' mapping services such *OpenStreetMap* will slowly become more professionalised (a lot of government money and data is being pushed into such services) while the open government based data will in turn become 'checked' and improved upon by the public. In other words, a de-professionalisation of both the making and ownership of maps seems imminent. But does this shift constitute a real change in the way we produce maps - or cater for different results than 'traditional' or 'conventional' maps? To attempt to answer this question we first have to try to understand what it is that is considered 'wrong' with conventional mapmaking.

### Relations between conventional mapping critique and social media-based mapping

There are three distinct points that can be made in the critique of conventional mapmaking that are increasingly picked up on by social-media-based mapping efforts in popular settlements. One is that rather than being universal, conventional mapping categories are social constructs, and what is depicted on a map can be seen as propositional rather than factual (Wood 1992). On any official map of Nairobi purchasable in bookshops across the city, there will be no reference to popular settlements such as Kibera, Mathare, Pumwani, or Korogocho. Although the place names might be present, on the official maps the areas are seemingly uninhabited without buildings or roads. But the truth is that these are densely built, densely populated places.

Secondly, made obvious by the popular shift towards more open, social media-based mapping systems, conventional mapmaking has been criticised for being elitist and too professionalised. This critique is linked to larger socio-political issues of ownership, power distribution, and democratically grounded data collection (see e.g. [wiki/openstreetmap.org/wiki/](http://wiki/openstreetmap.org/wiki/)).

Thirdly, the historical turn towards a professionalization of map-making has according to Mbodj (2008) and Black (2000) produced maps with rather more quantitative, absolute, and measurable results, than qualitative values. This is problematic when mapping popular urban settlements brimming with uncertainty, as they will relate poorly to categorical and absolute mapping schemata.

There are numerous claims that new, digitally based, de-professionalised, crowdsourced mapping endeavours are able to compensate for these traditional ‘flaws’ in mapping, and that crowdsourced and participatory (digital) mapping represent a new future for mapping popular settlements in the South. World Bank Managing Director Caroline Anstey says of crowdsourcing data that:

... today’s interactive maps can guide development to the places it is needed most. Crowdsourced mapping platforms can serve as a foundation allowing citizens not just to map but to give feedback on the reach and quality of the services in their community. And that information can be used to improve service delivery, fight corruption and track resources. (Anstey 2012)

Furthermore, she claims, this technology “offers the potential to open up a new path for the developing world” (2012). However, there is little research supporting such claims. It is therefore important to scrutinise these new digital tools more closely from an academic point of view, in order to assess whether they fare any better than conventional mapping tools.

### MAPPING KIBERA WITH SOCIAL MEDIA-BASED MAPPING TOOLS

#### About *Ushahidi*

Having been deployed over 6000 times in a range of situations by numerous organisations, *Ushahidi* is one of the most successful social media based mapping platforms available. It has been used to monitor elections in Sudan, Liberia, Côte d’Ivoire, map the crisis following the earthquakes in Haiti and Chile, and the floods in Pakistan and Australia. In addition, several maps were produced in the wake of the ‘Arab Spring’ in 2011, such as the Libya Crisis Map (Bergby, 2011). For more urban development related purposes, the *Ushahidi* platform is being used by residents in Kibera, one of the largest popular settlements in Nairobi, which serves as the case for this chapter.

*Ushahidi* is a Kenyan non-profit company that initially devised a social media-based platform to register incidents of post-electoral violence in Kenya in 2007. The submitted information was geo-referenced on an online map, with data submitted by SMS. No Internet access was required. With around 45 000 users, the first *Ushahidi* platform showcased the potential of a technology focusing on “information collection and visualization, (...) democratization of information and increased transparency” (Bergby et al. ND, 4). Bergby further notes that as mobile phones are common even among the poor, it became “the primary means for submitting reports and receiving updates” as the *Ushahidi* platform was further developed “as an interactive mapping platform that could be deployed to monitor various crisis situations and map citizen reports” (Bergby et al. ND, 4-5).

The architecture of the platform is based on visualising information by attaching it to its geographical origin on a baseline map. In addition, the information is categorised according to desired topics and sub-topics. With numerous sources of information disseminated to numerous potential viewers in an open framework, Bergby points out that one of *Ushahidi*’s main traits “is to gather as much relevant and verifiable information as possible, not differing between different origins or the different roles of the submitters” (Bergby et al. ND, 5).

I will here look into the mapping endeavours by Map Kibera, a CBO that utilises mainly *Ushahidi* and *OpenStreetMap* as tools for mapping and registering on goings in Kibera. Despite *Ushahidi* and *OpenStreetMap* being two separate platforms and tools, the critique in this chapter focuses on these two platforms as adjoining tools. They will not be considered separately. I do this because a) they spring out of the same ideas that criticise conventional mapmaking and suggest alternative approaches to mapping, b) they are by and large operated by the same crowd, and c) either platform holds – in the case of Kibera – little functionality without one another.



Figure 4.2 Kibera is a densely built popular settlement located close to Nairobi city centre (author).

### About Kibera

Kibera (Figure 4.2) is an old settlement, almost as old as Nairobi itself. Established in 1904, retiring Nubian soldiers and their families were allocated plots on the military training grounds South of the Kenya African Rifles headquarters along Ngong Road (de Smedt 2009). The area, then a bushy hillside, was called ‘Kibra’, most often cited to mean ‘Forest’ in Nubi (e.g. Ekdale 2011). Due to the specific politics of the colonial administration with regards to the growing African (labourer) population, many were forced to settle unofficially outside the town centre in neighbourhoods like Kibera. As in similar situations in colonial cities this gave rise to an informal sector, which in turn fostered a large number of informally built homes and structures. Often seen as insalubrious and unwanted, areas such as Kibera – popularly known as slums – have been the targets of demolitions, harassment by officials, and have been the cause of much political strife (Nevanlinna 1996). Nonetheless the area and its population has continued to grow, and is today highly diversified with people hailing from different backgrounds, belonging to a range of income groups.

The 13 villages that make up Kibera are probably home to well over 250 000 people<sup>1</sup>. Though poverty and miserable conditions are rife in Kibera, the area is also host to a population well adept at creating livelihoods through informal channels. The mix of formal and informal legislature creates a complex web of social, political, and economic systems. Following, Kibera can be perceived of as a town in a town, host to a plethora of businesses,

<sup>1</sup> See web-log entry at brianekdale.com Sept 5<sup>th</sup>, 2010, shedding further light on the issue.

where all manner of products and commodities are available. Although reputedly more expensive than in the ‘city proper’, basic services such as water and electricity are offered. As in most of urban Kenya, people keep abreast with technological advancements in Kibera, where for instance mobile phone ownership is substantial.

In contrast to today’s poverty, an emergent middle class was on the rise in Kibera in the 1950s (de Smedt 2009, 211). Earning most of their wealth from rent and liquor sales, the socio-political climate of the times curtailed any further class developments. Years of political and economic bartering coupled with highly unclear judicial overlaps have resulted in home and plot ownership being reserved for a limited few (Médard 2010, 37-43). With such developments being common throughout Nairobi, it is estimated that most 80% of the city’s population are renters (UN-HABITAT 2011, 144). As a result, Kibera is a surprisingly expensive place to reside.

### *Ushahidi and OpenStreetMap in Kibera*

With recent advancements of social media based, online map-making services, local grassroots organisations in Kibera are now producing readily available online maps of their own communities. Established in 2009, Map Kibera utilises *OpenStreetMap* and the *Ushahidi* platforms to address directly the issue of using a predominantly static tool (the map) to portray information about a situation that ‘changes every day’ (see [geospatialrevolution.psu.edu/episode4](http://geospatialrevolution.psu.edu/episode4)). The gist of the argument is that these areas are by their very nature changing and dynamic – perhaps much more so than formal city areas. But how do you portray this in a map, that is by its very nature static? And how do you keep up to date the ever-changing situation on the ground?

The solution for the Map Kibera Team was to use *OpenStreetMap* where numerous editors could alter the information on the map as the actual situation in Kibera unfolds (Lundine 2011b). Volunteers, having undergone map-making and GIS training, created a baseline map onto which new information is constantly uploaded and verified, providing an almost real-time upkeep of a map resource. Map Kibera’s efforts have since been divided between three digital platforms (or ‘programs’), notably utilising *OpenStreetMap* and *Ushahidi*.

The map of Kibera in *OpenStreetMap* was created in three weeks in November 2009 by the Map Kibera team ([mapkibera.org/wiki](http://mapkibera.org/wiki)). The *OpenStreetMap* platform allows anyone to be an editor of map contents, and several editors have made amendments since the initial mapping. This has resulted in a map that if we are to trust its editors, is constantly up to date. The *OpenStreetMap* Foundation also claims that this openness adds to the maps reliability over other maps:





Figure 4.3 Kibera as presented by *bing* in March 2012.

The essence of a wiki-style process is that all users have a stake in having accurate data. If one person puts in inaccurate data, maliciously or accidentally, the other 99.9% of people can check it, fix it, or get rid of it. The vast majority of good-intentioned participants can automatically correct for the few bad apples. ([wiki.openstreetmap.org/wiki/FAQ](http://wiki.openstreetmap.org/wiki/FAQ))

Accurate or not, what is immediately clear from Figures 4.3 and 4.4 is that the *OpenStreetMap* of Kibera conveys a lot more information than other digital map providers such as *bing*, *Google maps*, or *Tracks4Africa*.

Barring discussions of the quality of the maps, it is the open architecture of services such as *OpenStreetMap* that stands out as pivotal achievements when compared to closed services such as *Google Maps*. In theory, *OpenStreetMap* provides the public with the possibility to get involved in and directly influence the making of maps. In terms of dissemination these maps are just as available to the public as any other free online map service. As such, *OpenStreetMap* provides a competitive alternative to *Google Maps* based on a completely different map-making process, catering for much larger, more direct, and more locally based user (and mapper) inputs. The map details for Kibera added by local contributors in *OpenStreetMap* exemplify this.

The second platform, *Voice of Kibera* (Figure 4.5), utilises *Ushahidi*. It overlays the *OpenStreetMap* baseline map with information pertaining to newsworthy occurrences in the villages of Kibera, be that fire outbreaks or organisation meetings. Through crowdsourcing the platform allows people to SMS or send emails with information to Map Kibera. The information is geo-tagged and placed over the *OpenStreetMap* baseline map. Geotagging



Figure 4.4 Kibera as presented by *OpenStreetMap* in March 2012.

is process whereby information (e.g. a newsfeed or an image) is given geographic references, in order to pin it down on a map. Updates are added regularly by Map Kibera staff that each are assigned to different local communities and regularly patrol their areas to update and verify information (Lundine 2011). The functionality of the Map Kibera project, as with many other social media based mapping efforts, is therefore that the baseline (somewhat static) map and the constantly shifting and updated input via the *Ushahidi* platform complement one another.

The third digital platform under Map Kibera is Kibera News Network. Here, reporters cover events and news in Kibera by use of text and video footage made available online. In addition to the mappers, the news team are a prime source of data for *Voice of Kibera's Ushahidi* platform (Lundine 2011b).

Together, these platforms become highly communicative platforms that differ in their approach from other channels such as newspapers, television, or closed map services. In the case of Map Kibera information is controlled and communicated by locals from the community. This is arguably different than information mapped from the outside by NGOs or government bodies.

#### ANALYSIS OF USE OF TOOLS

The mapping platforms deployed by Map Kibera can potentially assist in the further development and physical planning of Kibera because of their close to real-time information about social amenities, cultural events, physical conditions, dangers, etc. Until recently such issues would have

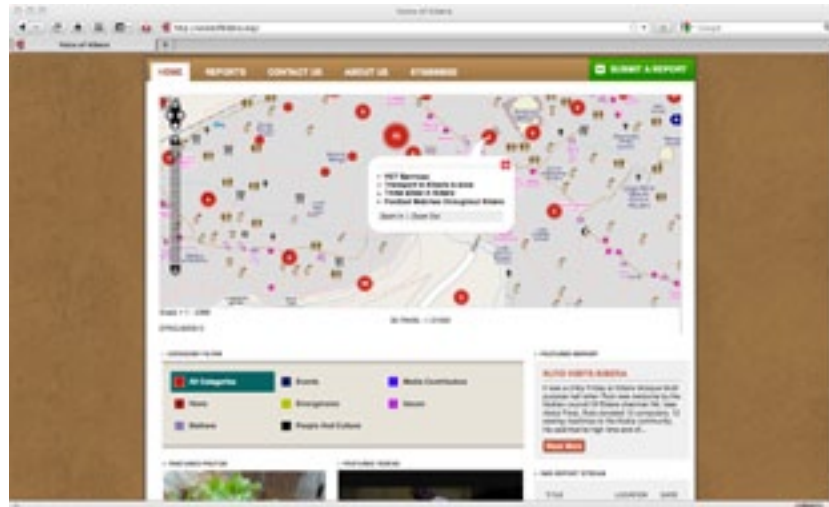


Figure 4.5 Screenshot of the *Voice of Kibera* Ushahidi platform.

been attempted tracked using ‘conventional’ mapping tools. But due to rapid changes on the ground, such information is increasingly being sought visualised by use of social media based mapping platforms. In light of the local initiatives and local knowledge imbued in these new platforms; the argument that such mapping platforms provide less propositional mapping inputs; and the critique regarding the static and compartmentalised nature of conventional mapping schemata, it becomes pertinent to investigate to what extent these new platforms are able to re-represent popular settlements.

### Technical, methodological, and communicative re-representation

I will here try to investigate some of the technical, methodological, and communicative aspects of these tools in order to make more clear how they differ from ‘conventional’ mapping tools in this regard. This includes asking questions such as; are the platforms open so that information is not forcibly compartmentalised in categories; are they less static; is information being conveyed in another manner than in conventional mapping and data collection; and if yes, is this helpful to the community in question?

#### *Categories and stasis*

Digital mapping tools can be less categorical and less static than ‘conventional’ mapping tools. However, with the growing number of mapping platforms available online, and with the growing number of

amateur mappers active on these platforms, it becomes important to discuss approaches to technicalities such as observation, depiction, and interpretation of these maps. With reference to Wood’s intra- and extrasignificant codes (2010) discussed in Chapter One: what codes go into a map - and what codes come out of a map? In other words, how is collected data interpreted by mappers and suitably paired with existing categories in *OpenStreetMap* – and how is this read by map-readers? In the case of Kibera, what colour will mappers in Kibera assign to a non-drivable trail, that for all intents and purposes is a main thoroughfare and economic aorta in the settlement, and how will map-readers interpret this? And does the trail change colour or line weight during the rains when it might be impassable?

Multiple authorship *may* enhance the correct placement and content of data. But as MacEachren notes (2004, 461), amateur mapmakers also tend disregard discussions regarding representation of e.g. signage: how we graphically depict what we are putting into the map, and in what possible ways this can be interpreted by the viewer (2004, Chapter 5). Like all other mapping platforms *OpenStreetMap* operates with signs and categories. The legend explains for instance what primary roads, secondary roads, tracks, and footways look like. Most roads in Kibera are indicated as tracks or footways. Amenities such as water taps (depicted as a tap and a glass), dukas (indicated by shopping carts or baskets), transformers (depicted as lighthouses), and bars (cocktail glasses) are not explained in the legend. Are these suitable for Kibera?

A discussion of whether these signs and categories need to be expanded on becomes increasingly important for popular settlements. As discussed in Chapter One, Black notes that the categorical nature of maps results in a “general failure of maps to communicate uncertainty” (Black 1997, 104). Is the typology specific to the settlement depicted differently than typologies found elsewhere? Are roads the same standard as in other parts of the city? Are in fact trails more important than roads - and are they given hierarchical importance over roads in the settlement? With the build up of platforms such as *OpenStreetMap* it should be feasible to accommodate for more categories that may be better able to capture the specifics of the settlement, and in part provide an alternative to Black’s criticism.

Should these issues be attempted resolved by social media based mapping contributions however, another issue crops up. If different sets of signs and a different understanding of them are needed for popular settlements, how can a map of such settlement be successfully meshed with a map of the rest of the city? This becomes relevant for outfits like *Map Kibera*, whose agenda is in part to show to the outside world that Kibera exists (Hagen 2010), and by extension wishes to show that Kibera is an integral part of Nairobi.

*Conveying information*

One of the undeniable strengths of digital platforms such as *Ushahidi* is that spatial information is conveyed differently than in ‘conventional’ mapping tools. In the layered spatial information available online the mapped settlement comes across with an immediacy and rich detail not afforded by paper-based conventional maps. Full appreciation of the digital map requires online access. Though this is readily available in popular settlements it may not be prioritised by the urban poor. This problem is solved in Kibera, where Map Kibera have been driven to produce rather more static material – ‘hard-copy’ atlases of the villages and neighbourhoods in Kibera – as a kind of Yellow Pages service to the local population (Lundine 2011b). They have also planned to increase public accessibility to the maps by commissioning local artists to paint map murals on walls in Kibera (Pétursdóttir 2011). Naturally, the dynamic character and immediacy of the almost real-time information available through the online map disappears in the non-digital maps.

**Social and political re-representation**

Across the ideological board, maps and map-making are considered to be easily adaptable to social and political agendas (e.g. Monmonier 1996; Black 2000). Some of the rhetoric extolling new social media based mapping platforms seeks to distance such technology from such agendas (e.g. Anstey 2012 or [wiki.openstreetmap.org/wiki/FAQ](http://wiki.openstreetmap.org/wiki/FAQ)). Hashing out such issues become important when mapping popular settlements that arguably are hotspots of social and political strife. The following questions can therefore be asked; are the platforms operated by local initiatives and informed by local knowledge; are the platforms more democratic tools than conventional maps; is the information displayed more trustworthy, objective, and less biased than conventional maps; and does that matter for the sake of the community and its needs?

*Local grounding?*

Map Kibera was established by a group of young, pro-democracy Americans. Their ideological stance seems to influence Map Kibera’s reason d’être. In a documentary made by Penn State, Co-founder Mikel Maron is helpful in letting us in on the actual goals of the project. Goals that are not without socio-political implications: “So who is actually guiding that place? How is that place going to move forward?” Maron muses ([geospatialrevolution.psu.edu](http://geospatialrevolution.psu.edu) episode 4). In other words, the map of Kibera seems to be created with the intent that it will be part of guiding the future development of Kibera. Though it is today being run mostly by Kiberans, the project founders and

supervisors are outsiders. As such, the map may well be informed by local knowledge, but the maps deployment (its purpose) seems informed by outside entities.

*The propositional nature of Map Kibera*

It may be interesting to frame the Map Kibera project in light of the discussion on *the propositional nature of maps* presented in Chapter One. Jamie Lundine of Map Kibera writes about the right to information in her blogpost *Whose information?* which discusses the mandate of government, NGOs, and CBOs in collecting and dispersing data through mapping. She posits that data collection in essence is a government responsibility, but that sometimes they “need a push in the right direction – a reminder of their role and their responsibility to the citizens of their country” (2011a), and that local initiatives therefore are merited. She does however remain sceptical to the interference in such matters by outside NGOs. Curiously enough, she does not reflect over the fact that Map Kibera, despite its current makeup of mostly Kiberans, was initiated from the outside, and is for all intents and purposes run by young representatives of the American pro-democracy movement. In addition, in most interviews conducted with Map Kibera staff, the socio-political driven need for mapping and information dissemination in Kibera is readily apparent. Says one mapper: “Now that such a map is there it can hold officials accountable” (Namale 2010).

The propositional nature of maps can also be addressed by way of a different example. Returning to the murals described by Pétursdóttir (2011) we can find one such depicted in Figure 4.6. This is a highly thematic map drawn on a wall in Kibera to inform passers-by of possible dangers. Such a ‘map of fear’ may well be accurate as well as important. It is however exemplary of the choosing of some data over other data as pointed out by Wood (1992), Black (2000), and Harley (2001) in Chapter One. By extension, one could argue, if we see this mural as one communicated result of new, open digital mapping tools, they are not nominally different from closed maps. We can still apply the same theoretical discussions to both kinds of maps: what information is presented, by whom, and what for? Harley’s three contexts are still useful for analysing such questions in relation to digital, open mapping platforms. Wood’s questioning of whose interest the map serves is still pertinent, and Black’s argument against ‘de-expertising’ map-making still holds. As with examples of SLA-inspired mapping covered in Chapter Three, there are unquestionable benefits of involving local groups in mapping exercises. But in both SLA-inspired mapping and social media-based mapping, participation is not a guarantee for achieving good analysis or presentation of data in mapping.



Figure 4.6 Mural map painted by Map Kibera (Map Kibera Trust 2013).

#### *Democratic tools?*

13 mappers were initially trained in using *OpenStreetMap* in 2009 (mapkibera.org/wiki – ‘The Story of Map Kibera’). According to ITO’s OSM mapper (a separate platform keeping track of edits made in *OpenStreetMap*) 38 editors have contributed changes or alterations to this material. It is difficult to find information pertaining to how many original contributions have been made through Map Kibera’s *Ushahidi* channel. It is quite possible that this number is high because of the prolific spread of mobile phones in Nairobi. Still, interviews with Map Kibera staff indicate that a substantial amount of the input for the *Ushahidi* platform stems from the ‘patrolling’ of neighbourhoods by map editors, or from the Kibera News Network Staff. Verification, ever so important to the validity of the information geo-tagged through the *Ushahidi* platform, is also conducted within the same group (Achieng 2011).

An example of what this can lead to is the distorted perception one gets of Kibera from the numerous postings about highly particular events such as filmmaking: “Slum Film Festival”, “Hollywood meets Kibera”, “Young filmmaker from Kibera gets scholarship to Ghetto Film School in the Bronx, New York”, “Kibera Film School Graduation 2011”, and “Women Learn About Film Making” are some of the headings clearly visible on the map. Most of these posts are done by the Kibera News Network, who naturally have a penchant for film and media. With respect to the map however, such voicing of proclivities may result in the misapprehension that Kiberans in general are overly interested in filmmaking.

Though the example may seem mundane, it proves an important point: a limited number of mappers with specific interests are not representative of the whole settlement. With upwards of 250 000 residents living in Kibera, the democratic aspects of the mapping can thus seem a bit weak.

The issue does point to an interesting academic discussion raised by Wood, and discussed in Chapter One, who idealises how a ‘de-expertising’ of mapping can enable the map “to work ... for you, for us.” (1992, 182-183). Wood wants maps to be more representative of the communities they portray. So does Map Kibera. The problem is that communities can be varied and multiple. How many maps would it take for a community to be truly and fairly represented?

The counter argument to such an academic discussion is that in contrast to conventional mapping endeavours, anyone can join in the mapping of Kibera through *OpenStreetMap* at any time. The bar is also quite low when it comes to contributing to the *Ushahidi* platform. Map Kibera does hold numerous workshops in and around popular settlements and seems to be quite visible to Kiberans (mapkibera.org/blog/). Given that the platform is relatively new, more time may need to pass for any serious empirical evidence to prove how democratic the platform has been in practice.

It could be speculated that the relatively low turnout of particularly editors in the *OpenStreetMap* pertains not to issues of democracy, but rather to interest (and perhaps also levels of computer skills), and the wherewithal of residents, that do not have the capacity to take part in any digital mapping venture.

What we do know is that due to the open architecture of platforms such as *OpenStreetMap* it is easy to gather meta-data monitoring edits and contributions. It is, for all intents and purposes, a transparent system. The amount of meta-data available on social media-based mapping efforts such as the one conducted by Map Kibera far outshines the amount of meta-data available on ‘formal’ mapping exercises carried out by NGOs or Government.

#### *Community needs?*

For the same reasons that Kiberans in general are not partaking in the mapping, they may also – as of yet – not be viewing the results online. Mildred Amway, a mapper for Map Kibera, implies that the project is one of information dissemination among Kibera residents: “We have hospitals in Kibera, but if you ask people in Kibera who live there, they don’t know where those hospitals are.” (Amway 2010). But gaining this knowledge requires Internet access – access that even Map Kibera point out is a problem (Hagen 2010). But Map Kibera may also have other nominated readers

than the local population in Kibera. According to Map Kibera co-founder Erica Hagen, the main intent of Map Kibera is to put Kibera on the map, as it is currently a ‘blank spot’ that is seen as illegitimate, as it did not exist on official maps of Nairobi (Hagen 2010). That is, to make it visible to the outside world, partly with help from that outside world. Indeed, the *Ushahidi/OpenStreetMap* movement, if seen in the light of recent upheavals in North Africa and the Middle East, come across as a mixture of pro-western democracy enthusiasts, and local agendas seeking to change national power structures. Although Map Kibera are not there to riot, if seen in relation to the Kenyan State and its particular history, their commitment to opening up and making public maps of their own (non-existent) neighbourhoods harbours traces of soft civil resistance.

This can be exemplified by the following posts on the *Ushahidi* platform: on March 24<sup>th</sup> 2012 the following update comments ironically on the lack of relations between the power elite and Kibera: “The honourable prime Minister is expected to hold a rally in his backyard Lang’ata, Kibera at the famous Kamukunji grounds later in the day”. On Aug 12<sup>th</sup>, 2010 the *Ushahidi* platform was used to issue warnings against authorities: “Police out to remove illegal electric power lines in Iaini saba, Kibera”. And on Oct 19<sup>th</sup> 2010, a 2-minute film entitled *The Forgotten Village* is posted: “Away from the public’s eyes”, Kibera is according to this news report “a sociological paradox – a home to the poor, and a goldmine to the rich”. In the post’s online comment field *sirjonduke* states: “Raila where art thou? Your backyard needs a champion.” The lament is echoed by *Myldread*: “Amen! His village is drowning deep.”

### Contextual considerations

The critique of the use of social media-based mapping presented in this chapter needs to be seen in relation to the context in which it is deployed. There is evidence to suggest that the use of social media based, crowdsourced information in maps works differently in different contexts. Bergby’s analysis (2011) of the deployment of the *Ushahidi* platform in Haiti after the earthquake of 2009, clearly indicates that the platform worked well in Port au Prince, despite a few technical setbacks and room for improvements.

So why does it raise questions in Nairobi? Morozov provides some insight to this when pointing out that “the reason why many projects that rely on crowdsourcing produce trustworthy data in natural disasters is because those are usually political events” (2011, 271). The earthquake in Haiti was a catastrophic natural disaster. And although it can be forcefully argued that the economic wherewithal of Port au Prince residents is mirrored in the low

quality of the housing stock and its inability to withstand earthquake tremors – and that as such the earthquake resulted in a man-made disaster – opinions about urban poverty and the role of government seems to have had very little bearing on the mapped information produced in the aftermath of the quake. While *Ushahidi* may work ‘objectively’ in Haiti, it is for all intents and purposes a political tool in Kibera. This is an important tipping point.

### HAS MAPPING PROGRESSED AS A RESULT OF DIGITAL TECHNOLOGY?

Considering Map Kibera’s efforts at face value, their achievements are highly commendable. Through use of social media based mapping platforms they have managed to document that popular settlements are not as homogeneous, static, or victimised as some renditions would have it. Through use of new technology they have produced ‘subversive’ maps that counter common, historically ingrained understandings of popular settlements in Nairobi. However, they are argumentative maps, made by a few. But as argued throughout this thesis, that is the nature of maps.

A shift in mapmaking by use of crowdsourcing data and utilising social media platforms might shift power from expert mappers (the elite few) to amateur mappers (the majority), but does not remove agendas or biases. It would seem that no matter how methods and approaches to mapmaking are attempted changed or altered; an inherent orientation will always be at the core of mapmaking. I would therefore propose that Map Kibera’s self asserted claim to *objective righteousness* should be dismissed in exchange for a *subjective right* to the city. I believe it is possible to see the claims of objectivity made by the *OpenStreetMap* crowd as erroneous and still welcome Map Kibera’s work as a claim of a right to the city.

Map Kibera’s *Ushahidi* platform is full of postings that not only take a clear stance against the view commonly held by outsiders regarding their community, but also seeks to prove these views wrong by highlighting diversity, entrepreneurialship, and unity among residents: on Feb 8<sup>th</sup>, 2012 a post declares: “Kibera, one that has been seen to be a place of violence, theft and negative vices, is in itself proving people wrong. Kibera TV, one of the good initiatives happening within Kibera slums is in the process of entering into a partnership with A24 media to help spread and share good stories/the stories of Kibera”. On July 18<sup>th</sup>, 2011 the following post was uploaded: “Several local entrepreneurs are rebuilding after a fire destroyed their businesses last week (...). Business-owner Peter Onwengo said, “I lost everything, but I will rebuild my business. I hope to be open within two days. Currently I am raising money to replenish my supplies”. And on May 20<sup>th</sup>, 2010 “Ladies of Kibera, Soweto village near the bridge, have dedicated

themselves to clean up a sewage blocked by garbage as a result of the heavy rains witnessed in the passed few days". The list goes on; 5 000 strong turnouts at public movie screenings (June 25<sup>th</sup>, 2010); TED talks featuring Kibera (July 16<sup>th</sup>, 2010); or free medical services and social services provided for residents (e.g. Nov 10<sup>th</sup>, 2010).

The right to the city has often been associated, in a liberal sense, with the 'right' to participation through consumption. Such notions exclude many urban groups, something that is especially important considering the urban poor in popular settlements in the global South. Here the notion of participation through consumption becomes fundamentally non-democratic. Still, it is this liberal viewpoint of what the city and citizenship ought to be that has had the most influence on official master plans (1948), strategies (1973), and visions (2009) for the urban planning of Nairobi. These plans may have contributed to the build up of a globally connected metropolitan CBD, but have at the same time exacerbated class differences, and geographically segregated moneyed and impoverished communities in Nairobi.

It is under such conditions that Map Kibera's alternative representations of their neighbourhoods have the ability to become powerful subversive tools. In a 'Lefebvrian' sense, aspects of the concept of *the right to the city* can be applied to understanding Map Kibera's efforts as an attempt to claim the "right to command the urban process" (Harvey 2008, 28). What the concept elucidates in the case of Map Kibera is that *democracy* implies different things. While the 'democratic' principles of social media-based mapping that *OpenStreetMap* and Map Kibera subscribe to have been seriously questioned throughout this chapter, it is something different to utilise social media-based mapping tools in the struggle for democratising the right to commanding urban processes. The social media-based mapping tools used by Map Kibera are being used to collect data in order to shed light on what are considered to be injustices by residents, or attempt to debunk myths about popular settlements and the form of African urbanity that is specific to Nairobi (that is, an urbanity that is representative of most of Nairobi's population, an urbanity that for the most part exists outside of the CBD and affluent neighbourhoods such as Karen, Lavington, Westlands, or Gigiri).

This particular use of the tool base can be further developed. By collecting data and posing questions, such maps can be part of destabilising existing power structures, and assist the majority in (democratically) reclaiming the right to command the urban process. The following is an attempt to exemplify what this could mean. None of these examples have been tested, and are therefore merely speculative propositions. The list of examples can of course be extended and altered.

One example is the debacle of ownership and right to tenure among the urban poor. Though it is highly unlikely that a series of 'subversive' maps will directly affect residents' abilities to command such processes, the maps, the technology, and the social structures created around such maps could quite possibly assist in illuminating such murky corners of the urban processes in Nairobi.

The myth of the urban-rural divide, and the notion that Nairobi is a colonial city is another example of a topic social media-based mapping could tackle. There is evidence to suggest that African urban residents do not necessarily make the distinctions between urban and rural in the same manner as in European discourse, and that this (amongst others) is defining of the particularities of the African urbanity of Nairobi<sup>2</sup>. The urban-rural division also idealises notions of urbanity in the sense that it suppresses the complexities of urban life (Robbins 2008, 37-45). Interviews and fieldwork carried out in Pumwani in 2012 indicate that this is true also for Nairobi. Robbins argues that part of what makes a city a city is its multiplicity. For urban planners and scholars studying cities like Nairobi this becomes a key issue because it makes the city and its neighbourhoods hard to fathom.

Map Kibera's use of social media-based mapping tools begins to visualise and juxtapose the multiplicity of urbanity that Robbins describes. The use of social media-based mapping can therefore be twofold: not only would a portrayal of the multiplicity of African urbanity in Nairobi assist residents in claiming their democratic rights; it would also help urban development processes by making clear information about popular settlements that otherwise may have been concealed. However, as iterated throughout this paper, this does *not* suggest that any new information brought forth through new methods of mapping will be objective or truthful: it merely suggests new ways of seeing, comparing, and analysing residents' proclivities. There is, I think, an important distinction between these two ways of understanding the map and its contents. It may just be that it will prove easier to cater for more salubrious urban developments through the latter than through the former and its misguided quest for absolute truth.

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<sup>2</sup> Raymond Williams (1973, 96-107) points out that the idea of the urban-rural divide is even a construct in Europe. Scrutinising conditions in England, Williams posits that the negative focus on industrialisation processes and the romanticising of rural conditions obscures the fact that both countryside and city are under the heel of a capitalist mode of production. As such, both are fundamentally influenced by the same forces.

## CONCLUSION

The case of Map Kibera and their use of *OpenStreetMap* and *Ushahidi* reveals some serious, albeit not surprising concerns as to the limits and pitfalls of utilising social media-based mapping tools in urban development. On the other hand the material reveals some exciting possibilities such digital tools may offer for planning purposes.

Arguments made by both the open source lobby as well as the development industry suggest that the use of crowdsourcing and new social media-based mapping tools dissolves old power structures of conventional mapping techniques. With the new tools the general public are the mappers, and data input is considered more accurate and objective. In Nairobi, with a limited scope and limited participation, the platform becomes politicised, utilised by a ‘mapping elite’, allowing for the emergence of propositional, rather than factual results. Although many observers point out that the platform is versatile, as for now, in the case of Map Kibera, it has turned into a somewhat limited tool. As such the platform adheres to the historical logic of mapping.

Still, it is possible to make a distinction between claiming that the data from social media-based mapping tools are objective and democratically gathered, and claiming the democratic right to participating in urban processes by using social media-based mapping tools to expound issues seen as unjust or incorrect. It is by use of the latter that social media-based mapping tools like the ones used by Map Kibera can become important and powerful tools for urban development.

Given the problematics raised in this chapter on the current state of digital tools in mapping popular settlements, there is evidence to suggest that there are some core issues pertaining to mapping that have not yet successfully been dealt with through digitalising mapping tools.

There is no denying that digital tools may well enhance mapping efforts. But in order for them to function adequately, I would argue, root problematics such as the ones highlighted in this chapter need to be addresses. As the tools stand now, some seem immature, with glitches that cannot be addressed by looking at the tools alone. More attention has to be paid to the theoretical and methodical drivers behind such tools. I would argue that addressing these issues is best be done by scrutinising their ‘analogue’ baselines.

With this the review of historical and current mapping efforts in popular settlements in Nairobi has come to an end. The material presented in Part I can in itself be seen as a contribution to research on urban development in Nairobi. However, this is not the main aim of the thesis. In the following

chapters I will be focusing on developing a suggestion for a mapping method in a popular settlement, based on the findings in Part I. For this suggested mapping method I have chosen not to focus particularly on the usability of digital tools in mapping popular settlements, but rather to focus on other, core questions pertaining to mapping in such areas. The next chapter addresses some of these core issues, and how to possibly construct a mapping method.

**PART II**  
**Mapping Pumwani**



## 5. Constructing a mapping method

### INITIAL ARGUMENTS

In Part I of this thesis a number of issues regarding mapping in popular settlements have been discussed. First, a general overview of mapping critiques was presented and related to urban development challenges in popular settlements. Second, a more specific overview of historical mapping efforts in popular settlements in Nairobi was provided, highlighting periodical shifts in mapping approaches and policies. Third, a more detailed analysis of current participatory mapping efforts was offered, ending in a review of digital participatory mapping.

The analyses offered in Part I allow us to distinguish between mapping efforts along the following lines:

- Efforts that only focus on spatial issues in settlements by mapping buildings, infrastructure, and natural formations (e.g. rivers and contour lines).
- Efforts that map spatial *and* social, economic, or cultural issues in a schematic manner that makes it difficult for connections to be made between such issues, and that may disregard contextual considerations.
- Efforts that successfully demonstrate how social, economic, cultural, and political issues are intrinsic to understanding spatial developments in popular settlements, and that allow for considerable flexibility regarding approaches and themes in order to cater for context.

In Part II I will suggest a mapping method for a popular settlement in Nairobi. This method can be construed as a synthesis of ‘best practice’ examples reviewed in Part I. In this chapter I will explain how I have gone about developing the method, and discuss what such a mapping could possibly add to the discourse on mapping methods covered in Part I.

I will in this part of the thesis move from the general examination of mapping efforts in Nairobi to a mapping of a specific place in the city, the popular settlement of Pumwani.

Situated across the river from central Nairobi, Pumwani is one of the city's oldest settlements, having been constructed in the early 1920s. For a time it served as the only legal settlement in Nairobi for Africans to settle in, creating the grounds for a varied ethnical and socio-economic environment that still persists today. The strong presence of Swahili cultural helped develop a common identity for residents. This identity is palpable in customs, language, dress, and architecture, which in many places still consists of original 1920s Swahili-inspired housing units built from mud, wattle, and plaster.

The proposed mapping method used in Pumwani aims to connect historical issues to current events, and to make assumptions about future developments. This is done through visualising variables in a discrete way, and forcing the analyst to create discrete sets of socio-economic categories that are analysed in relation to one another. This, I argue, creates guidelines useful to planning and design: the planner and local participants joining in the mapping exercises will be better equipped to understand situations in the settlement today, and make predictions about how things will develop. Constructing such categories allows planners and mapping participants to make more informed decisions about what are useful interventions in the community (and for whom such interventions are useful).

I argue that when mapping popular settlements where there may be scarcity of knowledge useful to planning and interventions, the most effective mapping methods are those that:

- Make connections between spatial practices and those of a social, economic, political, or cultural nature.
- Understand that a *place*, with its multiple dynamics cannot be reduced to either spatial, social, economic, political, or cultural developments, but that *place* is a product of all these developments.
- Allow context to inform approaches to mapping settlements.
- Are able to visualise discrete categories, thus operationalizing knowledge about place in ways that are helpful to urban design-based interventions.

As examples of such contextually sensitive, discrete categories in the case of Pumwani can be mentioned; identity building and social cohesion among residents; relations to family and kin; distinctions within social classes; the importance of cultural conservatism in creating economic stability; building regulations and legal status of land and its affect on social and economic stability, and; the pressures of the market the social effects of this.

Based on the above examples of categories, I will further hold that the mapping methods best able to visualise such discrete categories and make connections between spatial and social, economic, political, or cultural practices are those that focus on the historical roots of current developments in settlements, as well as the micro-macro linkages between settlements, cities, and regions.

The mapping carried out in Pumwani for this research is in many ways a meta-study. It is a study of the application of mapping methods for Pumwani rather than being a study of Pumwani. That is to say, the research is not about what is being mapped, but rather about how things are mapped. I have therefore taken some liberties in terms of data collection, and have opted to use mapping methods to the extent that they enable a review of the methods themselves, rather than of the place.

Still, the review of method needs to build on data collection in, and analysis of the settlement. Thus, while the main focus in Part II is on method, substantial amounts of the text are devoted to the data collection and analysis of spatial and socio-economic conditions in Pumwani. Part II can therefore be read as both a review of a mapping method, and as a mapping and analysis of Pumwani. As the text progresses I have tried to be as rigorous as possible in informing the reader of whether I am reviewing the method or the location.

#### THE STRUCTURE OF THIS CHAPTER

In this chapter I will review the following issues important to the development of the mapping method:

In the first section, *synthesising approaches*, I first establish which examples it is that I will be using when constructing a method. These examples can be seen as representing two important approaches: historical mapping and asset mapping. I will therefore discuss these two approaches individually.

In the second section, *who and what gets represented*, I discuss the importance of influences on mapping efforts. I attempt to demonstrate where different influences come from and which form they can take.

In the concluding section I summarise how the above issues have specifically shaped the mapping method suggested in the following chapters.

## SYNTHESISING APPROACHES

From the previous chapters on historical and current mapping efforts in Nairobi it is possible to draw out some examples that successfully address the issues pointed out above. These examples stem from the current period of humanism, as well as from the more academically focused period in the 1970s. Examples from both these periods will be built on in the further exploration of the suggested mapping method.

From the humanism period I have chosen to base my mapping on existing SLA-inspired participatory mapping methods as exemplified by the ‘holistic’ approach described in Chapter Three. I have chosen to do so because SLA-inspired mapping is currently used by many actors in popular settlements, and is thus arguably useful to build on rather than suggesting a new set of methodological approaches to mapping. Caroline Moser’s 1974 - 2004 longitudinal study of an urban poor community in Indio Guayas, Ecuador published in *Ordinary Families, Extraordinary Lives* (2009) will serve as inspiration from this period.

I will attempt to synthesise this with mapping methods from the ‘academic period’ from 1963 to the late 1970s reviewed in Chapter Two. I will particularly be borrowing from this period’s methodical use of history as an analytical tool. To this end I am influenced by Janet Bujra’s *Pumwani: the politics of property - the study of an urban renewal scheme in Nairobi, Kenya* (1972).

The synthesis of these two researchers’ approaches provides an interesting combination: the historical grounding and diligent academic analysis of the ‘academic period’ provides for thorough research, but there is little in the mapping material to suggest possible interventions. This can be ascribed to academic observational and analytic approaches differing from a planning-based approach that facilitates for interventions. In the period of humanism, though sometimes cursory in drawing connections between issues, there is a tendency towards a more operational approach, allowing planners to suggest interventions.

Moser and Bujras’ mappings are suitable examples of useable work from these two periods not only because of the approaches they apply, but also because they present clear structures of their working methods, and are both consistent and transparent in how their findings were elicited and analysed from data material. Moreover, there are certain comparable elements in Bujra and Mosers’ works, amongst others because Moser’s longitudinal studies enable her to emphasise historical material.

**Bujra and Mosers’ works**

*Janet Bujra’s Pumwani: the politics of property - the study of an urban renewal scheme in Nairobi, Kenya* (1972).

Dr Janet Bujra is a British social anthropologist who, at the time of writing *The politics of property* was with the department of Anthropology and Sociology at the School of Oriental and African Studies (SOAS), University of London. The report was sponsored by the British Social Science Research Council, and is perhaps because of the departmental structure at SOAS best described as fused between anthropology and sociology in its approach.

The main aim of the report was to assess the social implications of Nairobi City Council’s decision to demolish Pumwani and relocate its inhabitants. The process resulted in the Calfonya (California) and Biafra redevelopment schemes completed in 1969 in Pumwani, which are important case study areas in the report. The demolishing and reconstruction of housing, and relocation of Pumwani residents was only partially completed when the report was finished. The process stranded (officially due to lack of funds), and was partially resuscitated in 1987 and 2003 with the building of Highrise. The redevelopment plans are still officially in operation, but in reality large parts of Pumwani’s physical structures of mud and wattle Majengo housing and adjoining extensions still exist as they did when Bujra carried out her research in 1970–72.

Bujra succeeds in revealing the dynamics of class, property, the redevelopment scheme, and a changing social fabric, in a type of settlement often viewed as homogeneous by other researchers (e.g. Nevanlinna 1999).

Bujra’s work functions as an inspiration in this thesis because she uses historical research as a method for mapping the formation of social groups and how they influence spatial developments. Bujra’s mapping is concise in a way that is useful to planning.

*Caroline Moser’s Ordinary Families, Extraordinary Lives: Assets and Poverty Reduction in Guayaquil, 1978-2004* (2009)

Caroline Moser is one of the foremost authorities on asset mapping: the vulnerabilities of urban poor communities and their ability for asset accumulation with a focus on households. Like DFID associated authors such as Carole Rakodi, Moser has researched and published extensively on asset mapping, an integral part of the Sustainable Livelihoods Approach.

In her book *Ordinary families extraordinary lives* Moser presents her longitudinal study of how urban poor families in Indio Guayas, Ecuador cope with poverty, and how the community and individual families develop over 30 years. Through participation in the community and relations with a number of families, Moser investigates how and why some families are able to get out of poverty while other struggle and remain poor over several generations. Her study analyses the community and families' assets in light of the economic and political framework of the local context, the city of Guayaquil, as well as being analysed in relation to the national level and development aid.

I draw on Moser's work mainly because her approach to mapping clearly shows how historical research can contribute to refining asset mapping in a way that is contextually sensitive while retaining operational qualities useful to interventions by planners.

### Using history as mapping

#### *Bujra's use of history*

With her study of class relations in Pumwani Bujra provides a unique contribution to the writing of Nairobi's social history. While many other studies relegate popular settlements to being socially homogenous (i.e. the home of the poor), focusing more on the glaring disparities between settlements and affluent neighbourhoods, Bujra unveils how popular settlements are socially manifold, governed by class and difference.

The specifics of Bujra's findings can in part be attributed to her approach to mapping and analysing conditions in a settlement. Bujra actively uses history as an analytical tool, and by doing so demonstrates how this can be helpful to creating discrete categories that explain pressing issues in a community. In Bujra's case this is exemplified by the formation and importance of class structures.

Through historical studies Bujra examines the social implications of relocation schemes. These exercises are both pointed and broad at the same time. Pointed because they focus on specific issues: the Calfonya and Biafra relocation schemes in Pumwani, and broad because they highlight the social implications of such schemes with connections being made between contextual and regional developments, and vice versa.

Bujra's approach is best exemplified by breaking down the contents of her study:

1. The first part examines the urban and national context through a brief historical analysis, thus laying the grounds for the problematics discussed in the remainder of the report.
2. The second part narrows the historical research to the local context of Pumwani where first and foremost class-based issues are discussed. Building on this foundation, Bujra paints a set of other issues that work alongside class and cannot be seen as divorced from class issues. These are: religious considerations, issues of leadership, ethnicity, and a debate on 'tribalism' (1972, Chapter Two).
3. Based on the data analysis in this part of the research, Bujra is able to identify the petty bourgeoisie as a key group in Pumwani, thus narrowing the scope of her research in the third section to mapping the internal and external influences on and of this group in Pumwani. Through a thorough historical analysis the formation, influence, and ultimately demise of the petty bourgeoisie is examined through four periods; the formative years; the nationalist phase; the Emergency; and independence and after. By use of case material, politics, religion, and the redevelopment schemes are discussed both at a local and citywide level.
4. In the two last sections of the research Bujra examines respectively the redevelopment schemes of Calfonya and Biafra. As the two developments are constructed differently and cater for different groups, Bujra's analysis is constructed differently. In the case of Calfonya, both landlords and tenants are interviewed and their answers and reactions examined in relation to the scheme and how adaptations were made, finances managed, and how lifestyles changed as a result. In the case of Biafra, owners and tenants were interviewed with regards to their reaction to changes in the physical environment and the resulting changes in social interaction.

Bujra's deliberate use of historical evidence allows her to investigate current conditions in Pumwani and isolate on a limited number of issues and groups of decisive importance to the redevelopment scheme. She cross-references her historical research with interviews conducted with residents. Although never acted upon by authorities or NGOs, Bujra developed with her approach a knowledge base that due to its categorical nature could have been directly applicable in interventions.

*Moser's use of history*

Moser's research benefits from her longitudinal study of Indio Guayas in the sense that data collection in the local context is comparable over a stretch of 30 years. Also, the understanding of the larger context - the structure of the state and its history are also incorporated into Moser's study due to the long timespan of the study.

Moser's research is about assets and asset mapping. Still, she uses history as an analytical tool throughout the study. The keen sense of history – both regionally and locally – allows Moser to make informed decisions when performing asset mapping: the assets of people and households are seen in relation to long term historical developments of a political, social, and economic nature.

For instance, Moser devotes Chapter Four to a discussion of the rapid urbanisation that occurred in the 1970s and early 1980s, linked to an oil boom economy, the return of democratic government, investments in infrastructure, and its effect on communities such as the ones she studies. In Chapter Five she discusses “a series of economic crises” in Ecuador from the late 1980s to the mid 2000s. The crises amongst others resulted in a “decline in the importance of national-level patronage politics”, with barrios having to turn to international NGOs “to negotiate for social services” (2009, loc. 945).

As with Bujra, historical analysis compels Moser to focus on how micro-macro dynamics affect the community. Issues related to employment and the job market, people's ability to organise, and women's standing in society are discussed in relation to both settlement and city. Also, the effects of international development agendas' influences on national policies are described, linked to urban developments and the settlement.

*History as a mapping tool in this thesis*

Few researchers have the luxury of (or tenacity in) spending 30 years gathering and analysing data, as was the case with Moser. Notwithstanding, in the case of shorter project timespans, it is still possible to obtain a thorough understanding of the larger context by way of desk studies. Archival material, other researchers, and government documents are all useful sources for obtaining a broader understanding of the larger context in which a community exists. As a direct result a more nuanced and detailed analysis of internal issues – as well as a more detailed analysis of the community and its relation to the city or region – will be possible to obtain. Bujra is an example of how a profound understanding of historical developments can be attained in a shorter timespan. Her fieldstudies and research spanned less than two years from 1970-72.

In the mapping I have conducted in Pumwani I have used historical research in a distinct way to achieve two things:

- To compile a list of categories, both events and social groups, of importance to the development of the settlement. These events and groups are explained and analysed. Highlighting such events and groups is helpful to examining current events by answering questions such as: can the highlighted historical events be linked to current events, and if so what is their importance today? Do historically important social groups still exist today? If yes, what is their standing? If no, what was the reason for their demise? In other words this nuanced and categorical backdrop provides the analytical basis for current events in the settlement.
- To provide a backdrop for interviews with resident respondents, where historical information is sought verified and expanded on through in-depth discussions.
- The possibility of projecting developments into the future. By mapping out the trajectories of historical developments (both events and groups) up until today, it is possible to speculate on the future trajectories of such developments. A broad and thorough historical backdrop allows for better 'future trajectories' to be sketched out because factors tend to be less isolated and influences between developments are more easily observable. As noted in Chapter Three, the usefulness of making connections between histories and futures in planning has been highlighted by institutions such as UN-HABITAT (2010, xix).

The historical research has been collected in a chapter of its own (Chapter Seven), where groups and events are clearly defined and explained, thus categorically nuancing developments in Pumwani to a number of manageable issues necessary for further analysis helpful to planning purposes.

In addition, the two main objectives of historical research outlined above also provided the structuring for the remaining chapters in this thesis. Chapter Eight follows from the historical research in chapter seven by analysing and mapping current events. In the Afterword in Part III I analyse possible futures and discuss interventions on the basis of this.

**Using asset mapping***Moser's use of asset mapping*

Due to the longevity of Moser's study her asset mapping is driven by historical analysis. Her work shows clearly that this strengthens research on assets, providing a nuanced and contextual iteration of the effects and use of

assets in the community. As such, Moser distances her study from examples of SLA-based mapping that apply schematic formulas in their approach. Moreover, with her historical knowledge of the context Moser uses asset mapping only where it is applicable, and is thus in keeping with DFID advice of utilising asset mapping in a flexible manner.

How does Moser connect historical analysis with asset mapping? As with Bujra, we can turn to Moser's structuring of her research to find examples:

- The first part of the research provides a history of the local area spanning from the 1970s to the 2000s, as well as describing historical developments on a national and citywide level. Moser then discusses the effects her study has had on theory and methodology: by introducing asset vulnerability and accumulation and compares this current paradigm of how to address issues of poverty with historical trends in poverty reduction strategies and policies. She ends the section with case examples from Indio Guayas summarising and comparing over time the data collected in relation to the theoretical framework, thus making connections between historical developments in both the community as well as in theory on assets.
- The second part examines the implications of Moser's longitudinal study and attempts to explain why conditions in Indio Guayas changed in the way that they did for the families involved. The analysis concerns itself with the accumulation of assets, and explains the processes of accumulation in the context of broad historical changes; housing is analysed in relation to city-wide spatial developments and political power plays; community leadership is analysed in relation to issues of human capital and politics; and employment opportunities and income generation are managed in a section on its own.
- Part three of Moser's study summarises the results of 30 years of change in Indio Guayas. Here Moser looks at how local historical developments have contributed to some households being able to move out of poverty. Gender relations are examined, in addition to intra-household relations, the changes in patterns and strategies in households for asset accumulation, a comparison of families that stay and leave, and in closing a look at problems connected to insecurity and violence.

I have introduced the basics of asset mapping - the main method of analysis in Moser's study - in Chapter Three, while reviewing the SLA framework. But unlike the rigid structure of the SLA framework, where five main types of assets - human capital, physical capital, financial capital, natural capital, and social capital - are the key pillars of analysis, Moser provides a slight variation on asset categories to better fit the context of her study. This

adaptation is informed by historical developments in Indio Guayas. Moser argues that given the labour market in Indio Guayas, labour has to be seen as a separate asset from financial capital (2009, Ch. 6).

#### *Asset mapping in this thesis*

I have used asset mapping as a tool to help guide interviews with respondents. Instead of only making categorical distinctions between assets such as social, physical, human, financial, and natural (DFID 1999), I have moulded asset mapping into a larger discussion as described by Hamdi (2012), who presents the following issues as important when mapping residents' situations in settlements:

- Mapping aspirations and ambitions, as they exist for different groups. These may be achievable or unrealistic. The aim is to describe in which direction various groups in Pumwani are attempting (or aspiring) to move.
- Mapping problems and issues that different groups see as pressing, be they small or big. These can be seen as common to people in Pumwani, or specific to the group, hindering them from attaining their aspirations.
- Mapping assets, as in the various social, physical, cultural, economic, and political connections, relations, and networks that the group in question belong to, rely on in every day life and can draw on in order to mitigate or solve problems that arise.
- Mapping conditions, i.e. the state of physical surroundings that the group in question bring out as important, that are not covered by mapping physical assets.
- Imagining futures, by exploring possible interventions given the previous discussions.

These larger categories do not provide the structure for the written material presented in this mapping, but rather they provide guidelines for interviews. Assets are discussed as a logical part of these guidelines, thus allowing for a more 'natural' flow of conversation that suits the nature of semi-structured interviews better than the categorical divisions between assets as described by DFID (1999).

As with Moser, historical knowledge played an important part to making asset mapping work. A number of aspects became apparent when using asset mapping in interviews with respondents, and were integrated into the mapping method where appropriate:

- Discussions with respondents regarding assets had to be adjusted to the group of respondents in order for the discussions to have any meaning. For instance, discussions regarding social assets were central in interviews with young intellectuals. However, when discussing social assets with prostitutes, questions could come across as crude and unpleasant to women who had been estranged by friends and family. Being able to adjust the focus of interviews so that respondents were comfortable and conversational was crucial to collecting data. Such adjustments to interviews were most effective where there was pre-existing knowledge of the historical developments that have come to shape the group in question. For instance: there are a large number of women house owners (landladies) in Pumwani. Many are descendants from prostitutes who were among the first to settle in Pumwani and be allotted plots (White 1990). Interviews with prostitutes or descendants from prostitutes therefore focused amongst others on housing (physical asset), its historical and current importance. White (1990) also describes social cohesion between sub-groups of prostitutes in Pumwani, while Bujra (1972) points to the political lobby power of prostitutes when organised. When broaching potentially difficult matters of social assets, interview questions focussed on assessing changing alliances from then till now.
- Discussions about assets were helpful as a starting point for discussing historical developments in the community. For instance, discussions about financial resources could lead to comparisons of job markets before and now. Also, discussions about house ownership (physical assets) almost always lead to discussions about the history of house ownership in the settlement.
- Assets were a good way to semi-structure interviews because of the comparability of issues discussed across groups, thus allowing for similarities and differences to stand out. For instance: in discussions about the respondent's use of social assets (e.g. connections, friends, associations) distinctions between landlord and business owner groups on the one hand, and petty traders or casual workers on the other hand were made evident.
- Following, this meant that respondents were able to make comparisons between themselves and others without being 'forcefully' questioned about differences and similarities within the community. In other words, in some cases asset mapping may have helped prevent respondents from providing answers that they *thought* were required of them.
- Oftentimes, discussions structured around assets would evolve into

talks where respondents would use their historical knowledge to discuss and explain political, economic, cultural, or social developments both at a local and national level. When this happened the discussions were allowed to carry on, possibly with more interesting results than if the asset categories were more strictly adhered to. In this way, assets were used as a starting point in order to find subject matters that respondents cared about. Focus was given to creating a 'relaxed atmosphere' for allowing the respondent to talk.

- The setup as described above should allow from respondents to make their own connections between aspirations, problems, and assets without being 'forcefully' lead into such discussions, and without analysis of their situation being made on their behalf by the interviewer/mapper. In some cases respondents made such connections. In other cases this did not happen.

Interviews were carried out with suitable respondents from different social groups. As mentioned earlier these groups were identified through historical research. The choice of social groups as the core focus of interviews needs explanation: Moser's focus on assets, and Bujra's focus on social groups give rise to an important distinction in thematic focus that has bearing on the kind of mapping carried out. While Moser analyses the community with regards to different kinds of household assets, focusing discussions on the meaning of the assets themselves, Bujra 'switches' this around to discuss social groups and how they differ from each other, for example by looking at the uneven distribution of assets<sup>1</sup>.

In Moser's case, the result is that the social fabric of Indio Guayas is presented as relatively homogenous, despite there being perceivable differences between households. In Bujra's case the result is that Pumwani comes across as being a divided community, despite clear indications that there are historical and cultural bonds joining residents together.

Like Bujra, I have chosen to focus on distinctions between groups rather than distinctions between assets, as the former reveals better the possible differences within a community. Highlighting such differences are important because it informs planners and participants of challenges related to what kinds of interventions a community is in need of. Highlighting differences opens up to important questions of; who gets represented in a mapping; what does a community consist of; and is a place cohesive enough to be considered *a* community. Discussing such issues are of pivotal importance

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<sup>1</sup> Bujra does not use the term "assets", but does look at resources available to respective groups, and discusses how these groups utilise their resources (political power, money, property, vocation). For the sake of argument I refer to these as assets because they are comparable to Moser's SLA-based assets.

when deciding what shape interventions are to take. Any mapping of a community therefore needs to uncover disparities, conflict, cohesion, and possible alliances within communities. It is to these issues I now turn.

#### WHO AND WHAT GETS REPRESENTED?

There are numerous approaches to mapping, analysing, and ultimately understanding a neighbourhood. The mapping method presented here is one such attempt. There aren't necessarily right or wrong approaches to mapping. Ultimately mapping efforts are influenced by a number of positions that knowingly or unknowingly are imbued in the map.

In such a discussion it is of little value to attempt to distinguish between subjectivity and objectivity. Instead I will here distinguish between a variety of influences that can be of importance to mapping – the influence of the profession; the influence of popular culture; and the influence of academic discourse.

Given the previously discussed importance to the planning profession of identifying which parts of a community would benefit from interventions, I then move on to problematize how to go about identifying groups in a settlement. These can be based on a variety of positions: professional, organisational, academic, and resident points of view.

#### Identifying influences

##### *The influence of professions*

Some mapping approaches are clearly politicised and suggestive, while others are less obvious in their directionality. The thematic scope of a mapping is often highly indicative of the direction the exercise will take. So are the thematic interests of the organisations or individuals carrying out the mapping. For instance UN-HABITAT, being an agency preoccupied with shelter and housing, will often focus on housing issues in their mapping exercises. Likewise, NGOs with a health profile will mostly tend to map health issues in communities, and professionals with a children's, youth, or education focus might highlight lack of or possibilities for education or activities in a settlement, such as exemplified by this excerpt from a presentation by a social worker in Pumwani:

Down in Kinyago I have students learning to read and write. 26 ladies and one young man. They are at different skills-levels, but after some six months most of them can read. (...) There are more than 20 extra curricular activities for children now, 350 children partake. Five football teams keep 150 youths

active. (...) The driving force behind a lot of this is called Anthony. 32 years old, he has been the main instigator and chosen leader of Kinyago United for the last 10-12 years. Kinyago United is a CBO, registered, with a board. Anthony is the reason why all our efforts in Kinyago have grown so rapidly. Anthony follows up every sponsored student personally until they reach high school. He is constantly in touch with parents, pushes for the kindergarten to develop, organises large football cups from Easter until Christmas open to all children from several slums. There are at least 17 teams for kids under 14 competing. He has also built a cybercafé equipped with four computers, a clubhouse, a library, classrooms, and four hot water showers. (Social worker respondent in Pumwani 2013)

In the same vein, Bujra (1972) is sociologically interested in class formation in African urban societies, and therefore approaches her material in a way that allows her to clearly differentiate between social groups in the community. Moser (2009) is, from a poverty alleviation point of view interested in the abilities of poor households to accumulate assets. Thus, she maps communities by collecting data on asset accumulation among households, and analyses this in relation to household survival strategies in the community. Both researchers have in other words chosen approaches to mapping their respective communities that best fit their research agendas. Arguably, there are aspects in both communities that are not mapped because they are considered uninteresting to the research topic, and are not picked up on by methods utilised.

##### *Popular influence*

We should not overlook the influence of popular opinion on our views of popular settlements. Though we as professionals and academics may wish to subscribe to more nuanced views, disregarding populist impressions of popular settlements being hotbeds for disease, crime, and drugs, such views may none the less influence us more than we know. I would argue that 'intellectually acceptable' work, such as acclaimed movies or novels can be as influential on our understanding of popular settlements as non-fictional, academically based mapping efforts. And though the novels or movies might be well-crafted pieces of art, they may none the less express dismal and derogatory views of settlements and urban life.

One example is Kenyan novelist Thomas Akare's 1981 novel *The Slums*. Akare writes of Eddy and his group of friends who are street boys living in the wrecks of old cars in Katanga, Pumwani. Akare paints an unsentimental and brutal picture of life in Pumwani and Nairobi for those at the very bottom of the social strata. Eddy has a GCSE certificate, but his education means nothing when there are no jobs available. The following is an excerpt from



the novel, where a disillusioned Eddy muses on what Pumwani is. Or framed differently: the following is an excerpt of what novelist Thomas Akare imagines a street boy in the 1970s would think about living in Pumwani. These are gloomy thoughts of a place of prostitution and drunkenness. A place no one wants to be associated with, not even the politicians that once came from Pumwani. And in their haste to disenfranchise Pumwani, Nairobians forget its historical significance as an African urban centre:

If anyone had told me that one day I would come to live in this place and, worse, in these wrecks, I would have knifed him. Nobody wanted to be told such a thing. No one wanted to be called Mtu wa Majengo<sup>2</sup>. Majengo or Pumwani was and still is considered to be the most evil corrupted place in the whole of Nairobi. And that is true. Tell anybody that he is from this place and see what will follow. The Slums as it was to me was evil. And corrupted. In the old time if it was hears that you had been to Majengo you were automatically an outcast. If you had a new bride that night you couldn't share a bed with her. The next day she would be gone. Every one feared the place. A city of the two shillings malaya<sup>3</sup>. A place of waSwahili<sup>4</sup>. A place where most of the children are sons and daughters of malaya. If a father was told that his son had been to Majengo that day he would sleep out. He would be cursed with all the dogs and cats of Lucifer. All the gods and satans. A father might kill his son even. Whoever went there was considered to have gone for the two-shilling fun. That was the first thought, followed by spirit. Spirit. This was the commonest drink of the place. It was being sold at Digo. And that is how the name Digo still exists. It was the name that most of the senior Nairobi dwellers knew. The old men who were lifetime drinkers. But one thing they never thought of. That some of the leaders or ministers could come from this place. And it is very strange that when they were passing through here they wound up all the car windows. They didn't want the smell of dust. They were even proposing that the Slums be demolished, forgetting that they too once dwelt here. That it was a disgrace to the whole city, forgetting that it was the mother city of Nairobi. It was only a mile or so from the city centre. The houses were built of mud. The roofs of tin. Very brown rusted tin. With alleys or paths between the mud houses full of shit. Left by all the young and old men and women. I came to Majengo when things fell apart.  
(Akare 1981, 22-23)

2 kiSwahili meaning "person from Majengo" (Majengo being the original/old neighbourhoods in Pumwani).

3 A prostitute.

4 Muslim from the coast. Possibly derogatory in this context, perhaps alluding to prostitution. The Swahili culture in Pumwani is historically strong, and incorporates many cultural and social aspects. Just what a 'Swahili' is can be hard to define. Says McVicar: "the term is essentially an epithet of reference and hence an important sociological pointer; but it is hardly ever used for self-identification" (1969, 125).

The dystopian Pumwani described by Akare is according to Kurtz "the ultimate example of all that had gone wrong since independence" (1998, 45). But Akare's choice of Pumwani as the setting for his novel underpins an important quality: the manifold and close connections between the settlement and the city. Pumwani is to Akare's characters a dynamic place, full of (missed) opportunities. It is the epicentre of all things urban, and is by no means disconnected from the city proper.

Influential Kenyan authors such as Akare and Ngugi were not only inspired by popular sentiments of the evils of the city, they also helped reinforce such sentiments. The influence of fiction in describing conditions in popular settlements should not be underestimated – at least not in comparison to non-fictional reports. Macgoye is another acclaimed Kenyan novelist who in *Coming to Birth* (1996 and 2000) describes life in Pumwani through the eyes of a young girl. Macgoye's novel is both a set book in school (Rence 2009) and curriculum for African Literature Undergraduates (Nan 2008), and has arguably reached a broader audience than e.g. Bujra's SOAS published report (1972).

When mapping popular settlements, we need to remember that renditions of popular settlements, such as the ones above may influence not only our understanding of a place, but also our mapping of it.

In Chapter One of this thesis, MacEachren (2004) expands on the understanding of what a map is, allowing for a number of sources of both a visual and text-based nature to be incorporated under the heading of 'mapping'. Also in Chapter One, Harley's three contexts of maps help us analyse this wide array of maps. Taken to the greatest extent of their meaning, it should be possible to critically consider all attempts at describing popular settlements, be it NGO statements or a novel by Thomas Akare, as adding to the wealth of mapping efforts in popular settlements.

By critically analysing such works and their authors we may be better equipped at using such influences constructively as more pronounced parts of our own mapping exercises.

#### *The influence of academic discourse*

While I above argue that Bujra applies a professional lens to her mapping of Pumwani in ways that best fit her research agenda, it can be argued that she is also an example of how a professional lens can be influenced by contemporary academic discourse.

Bujra contends that her application of analysis is necessitated in Pumwani because it is a community that despite its internal conflicts experiences

social coherence (1972, 2). She attempts to understand this through focusing on class rather than ethnicity, because previous studies on ethnicity have tended to ignore importance of class structures (1972, 4). Class is pivotal to understanding Pumwani she says because of the unique stratification between the propertied and non-propertied. Thus, she applies a Marxian analytical approach “because it focuses attention on the inter-connection between economic interests and political power” present in Pumwani in the form of urban property and skilled urban employment, of which “Pumwani people are aware of” (1972, 5).

Bujra’s topic and approach relate an on-going debate at the time, highlighting class relationships that were “in the process of being forged” (1972, 4) in urban Africa. Bujra references Lloyd (1966 55–56); Epstein (1967, 283); and Sathyamurthy (1970, 2), as examples of academic literature addressing social stratification in urban settings in the South. Other later additions to this debate, relating specifically to the formation of an urban working class are e.g. Sandbrook and Cohen (1975) and Sandbrook (1975).

Determining which mapping approach to apply to a context is thus partially driven by existing academic discourse. In this respect, mapping efforts – like so much of academic production – serve not as definitive answers to understanding places, but rather as reiterations of research, and additions to discourse.

### **Identifying groups**

What seems to be a poor community need not be homogenous. Highlighting the different interests of residents: marginalised groups, interest organisations, powerful individuals, is important to planners seeking to do interventions, because success of interventions partially hinges on its usefulness to residents. What may be useful to one group may not be important to another. I have therefore chosen to devote substantial parts of the mapping exercise to identifying different groups in Pumwani in order to make clear the distinctions and commonalities that make up a community.

#### *Organisational, professional, and academic distinctions*

Not all mapping approaches are able to do so. SLA is an example of an approach where the household focus may result in communities coming across as uniform (e.g. Moser 2009) and can tend to veil social disparity, as pointed out in both SLA guidelines (2000) as well as SLA critiques (e.g. Beal 2002, 73). The critiques of such approaches highlight the necessity of

addressing group distinctions in communities when mapping, but provide little information about how to go about identifying groups.

The multiplicity of communities means that they can be divided into groups in several ways. Often, when relating to poor communities, vulnerable groups like women, children, and the elderly will be identified in order to make sure that interventions target those that need it the most. In Pumwani, St John’s is an example of an NGO that has initiated several activities and programs targeted at women, youth and children on the basis of a 2005 PUA mapping exercise.

The Riyadhha Mosque Committee is an example of an organisation that has identified the needy elderly as a vulnerable group, and is running a support program for them.

Vulnerability can also be ascribed to other groups, as Bujra (1972) points out. In her study of Pumwani she distinguishes between three main groups; the petty bourgeoisie house owners; the “client dependent, heirs, and hangers-on” of the petty bourgeoisie; and the poorly paid, semi-skilled work force. These, she argues constitute the main division lines in the community, and represent the structural distinctions between power and vulnerability.

#### *Local distinctions*

Respondent’s distinctions between groups in Pumwani are also diverse. The different understandings of the social situation in Pumwani could be seen as related to respondents’ own standing in society. Business owners would in general state that all residents were poor and that there was little internal difference. Tenants would generally make distinctions between the propertied and non-propertied. Low to mid-income landlords and landladies could sometimes distinguish between property owners that still resided in Pumwani and those that had moved out.

As an example one respondent landlady, who did not consider her house ownership a business venture, clearly differentiated between herself and richer businesspeople landlords or landladies that she claimed were waiting for a redevelopment scheme in order to sell at a profit. She considered there to be a larger social gap between herself and such ‘speculator’ landlords than between herself and her tenants.

On the other hand a landlord businessman respondent was of the opinion that none of the internally driven economic activities in Pumwani were sizeable enough not to be considered bona fide businesses. His stance was that ‘proper’ businessmen only existed outside of Pumwani, and that by comparison everyone in Pumwani was poor.

Other respondents – represented by a group of young intellectuals who are third generation Pumwani, who exude a common sense of pride and ownership to the community – were in general more optimistic in their outlook. I have included a longer excerpt of how one of these intellectuals describes Pumwani:

Pumwani is one of the oldest slums in Kenya, approximately 2 kilometers from the Central Business District. It is located in the Eastlands side of Nairobi city. It is characterized by mud houses, though in some areas you could see permanent structures, some new while others renovated.

Pumwani is divided in 6 regions, Sophia, Digo, Mashimoni, Kitui, Katanga and Bash (which part of it is highrise, first phase of Pumwani upgrade). A bigger percentage of the population is Muslim, who have lived together with Christians for quite a long time, the way of life is adapted from the Swahili culture. The area is feared for high rate of crime, prostitution, drug abuse and production and sale of illicit brew, among others.

Walking around the alleys, you can find lots of roadside businesses, mostly women selling vegetables, fruits and fast foods like French fries, maize and beans among others. Almost 95% (personal opinion) of these small businesses carried out in Pumwani have Gikomba market as a source of their products, of which people from even outside Nairobi come to get goods for consumption and or resale.

Facilities, in some regions of Pumwani have toilets, which have been rehabilitated by some CDF funds, with some capacity building on maintenance from small community initiatives. There are few other health facilities and dispensary, which serves the overgrown population. This can be evidenced when you move around some parts. You can see bursted sewage lines, heaps of garbage and overflowing drainage and everyone minding their own businesses.

Different categories of people carry out different socio economic activities. The youth engage in self-help groups and small businesses like car washing, toilet management and a big percentage have dropped out of School for various reasons; peer pressure, drug abuse, lack of school fees and so on. Some youths from Pumwani work for Somali's in Eastleigh; packing 'chewing Khat (Miraa) for export.

A section of the population works as temporary workers in the nearby Industrial Area while others work in the Jua Kali Sector.

The regions in Pumwani have different characteristics in terms of housing, business and so on and so forth. In Sophia, the houses look much better and the drainages a bit clean and the place doesn't really have a lot of socio

economic activities. In Digo, as you pass through the alleys you find people sitting by the sides, enjoying local beer from small metal tins. The main passage is usually overpopulated, with lots of loud music and people chatting, (actually shouting because of the loud music). Part of the area also hosts Commercial sex Workers

In Katanga, there are no much of activities; the area houses Pumwani Ryadha Mosque (still under construction) and Mumbai Shopping Mall. These two buildings have covered a wide part of the area. As for Mashimoni, the name itself describes the area. 'Mashimoni' comes from the word 'shimo' which is a Swahili word that means 'holes'

Kitui is much congested and the houses have no certain pattern. Most of the people there come from Kamba Community, of which the place is named after a town in their area (Kitui Town). As for Bash, it is the area that hosts the new highrise buildings, (phase one and two), the slum upgrade project.

Pumwani has a history as a source of some of the powerful people in political scene in the 60s and 70s (but most have died) like the likes of Tom Mboya and there have been speculations that the first president of Kenya, Jomo Kenyatta also lived in Pumwani, among others.

Some areas of Pumwani by night are more live than during the day; people doing small businesses, hotels and bars operating till late night, if not morning but other areas remain terribly dark and empty.

Almost everybody in Pumwani puts a smile on their face, despite the day to day struggle for economic sustainability. (Pumwani intellectual respondent 2013)

The respondent includes a wide range of social and economic groups and activities in his description. He describes possible vulnerabilities, but choses to emphasise many of the possibilities provided for and by residents. His narrative is ultimately a summary of the multiplicity of community that exists in Pumwani; the variety of vocations, of living standards, of neighbourhood vibes, of power and poverty, thus underlining that many of the approaches and points of view addressed in this chapter could be considered valid in their representations.

#### CONCLUSION: THE CONSTRUCTION OF THIS MAPPING METHOD

In this chapter I have attempted to summarise some discussions important to the construction of a mapping method. I have done this by looking at inspirational academic and professional approaches to mapping popular settlements and how to go about constructing a synthesis of mapping methods

on the basis of this inspiration. I have also looked at how approaches to mapping are influenced by professional, popular, and academic views, as well as how social distinctions within a settlement are interpreted.

This mapping attempts to understand what kind of mapping method would be useful for planners in collecting and analysing information before intervening in a settlement. To the planner, the success of an intervention can be measured in many ways both externally and internally; external political endorsement; ability to obtain financial support; and from an SLA-focus, the ability of residents to accumulate assets on the basis of the intervention.

If we focus on an intervention's ability to add to residents' assets accumulation, we would not only have to gain an understanding of what kinds of assets residents have. We would also have to determine whether the distribution of assets is uniform in the community, or whether there exists differences between resident groups.

If interventions are to succeed, and mapping methods be useful to planners I will argue that the methods have to be able to uncover what kinds of interventions might work for which groups, and which interventions might deter others. To the planner, obtaining knowledge about social groups in the community – and the distinctions, disputes, similarities, and allegiances between them – is an essential part of a mapping method.

As stated earlier, this is done through a synthesis of approaches inspired by Bujra (1972) and Moser (2009). A knowledge base about the settlement is created by triangulating information from historical sources and already existing mapping and research on the settlement. Based on this, interviews with respective groups are carried out to learn more about aspirations, problems, assets, and possibilities.

I have, as a part of the mapping method, triangulated discussions such as the ones above with historical data in order to find the most useful division lines useable to constructing categories for this mapping. Like Bujra I have chosen to mainly focus on different socio-economic groups because of a number of key issues I keep returning to when discussing the importance of various events in Pumwani, both historically and current, for instance:

- The issue of ownership that is different from most other places in Nairobi, that has resulted in the area keeping its historical structure and is partially the reason for halts in reconstruction.
- The large amount of small-scale property owners.
- The large amount of women small-scale property owners.

- The historical and current presence of people from a variety of ethnic and professional backgrounds.

Unlike Bujra, through the review of historical data presented in Chapter Seven, I have found it necessary to more finely distinguish between groups in Pumwani. This has made it possible to obtain a more nuanced albeit complex picture of the community, distinguishing between a total of thirteen groups of historical importance to Pumwani community. I will return to these in Chapters Seven and Eight.

Is the mapping presented in this thesis informed by the context of Pumwani? The answer is both yes and no. Yes in the sense that the historical material and prior research showed the context to be one of social multiplicity, with people hailing from a variety of backgrounds, but even so with a common bond defined by Swahili culture, outside pressure, intermarriages, and longevity of history. The context was thus instructive in defining a mapping approach that focused on uncovering the social differences and bonds in the community.

Still, I argue that the same approach of eliciting social difference and commonality is useful to planners all the same, indifferent of context, because planning needs for such information to be extracted in order for interventions to succeed.

In this chapter I have also discussed how different points of view, all argumentative in their own way, influence our understanding of popular settlements. These influences can be made up of blatant arguments, such as those of NGOs, they can be more 'subtle' in their positioning, such as in academic discourse, or they can be less apparent (but equally positioned) through popular culture influences in the form of novels or films.

I have here taken MacEachren's understanding of what a map is, and Harley's three contexts to the furthest extent of their meaning, by using them to analyse NGO statements and works of fiction based on the same criteria as academic mapping efforts.

I do so because I believe arguments from a number of points of view, such as the ones held in novels or films, affect not only our common understanding of popular settlements, but also the way in which we relate professionally to such settlements when mapping. By turning the arguments that these points of view hold from being 'hidden' influences on our work to utilising them intentionally as mapping sources, we can add to the breadth of our own mapping efforts in a critical manner.

In the following chapter I attempt to exemplify how different points of view can be both clear and hidden in mapping, and how these points of view can be the starting point for further research.

I have written a descriptive narrative introducing the outsider to Pumwani. The narrative is highly constructed; leaning on a number of unsubstantiated sources, and is highly selective in its rendition of the settlement. While some information is presented clearly, the description and visuals hint at a rich history and additional information to which the reader is not privy. Typical of many kinds of maps, this can be seen as an example of what Harley refers to as “the silence of maps” (2001, 67-69) discussed in Chapter One.

## 6. Introducing Pumwani

The following narrative is a construct. It is a plausible example of what a ‘one-off’ mapping of Pumwani could look like, providing an air of objectivity, while, in its succinctness, it leaves out information important to the deeper understanding of the dynamics of the settlement.

The reasons for constructing such a narrative are twofold. First, I have done this non-speculatively to introduce Pumwani to the reader in a short, expedient manner.

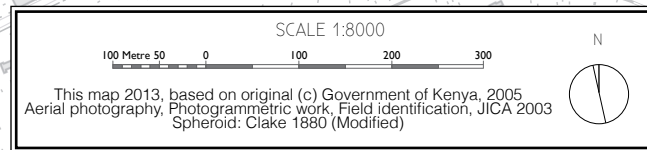
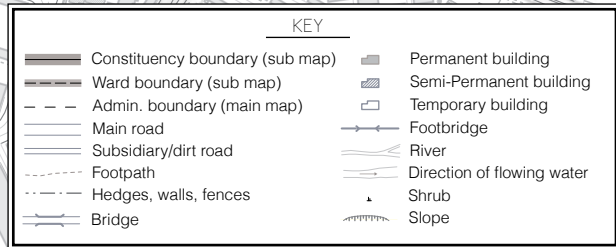
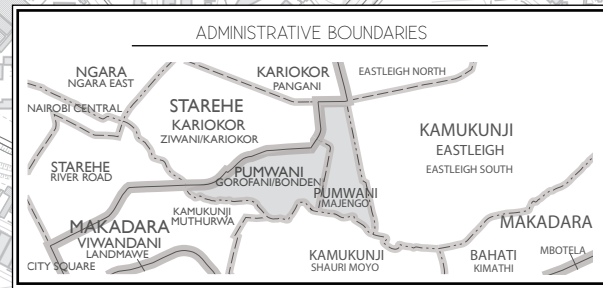
Secondly, and more speculatively, I have created this narrative in an attempt to exemplify how mapping sources could come across, while indicating how such sources can be used to ask critical questions, and the need for further research and mapping.

The borders of Pumwani, such as they are depicted in the map in Figure 6.1 are what most residents consider to be the socio-historical borders of the settlement. That is, many are aware that certain areas, such as California, Kinyago, Gorofani, or Bondeni are not administratively within Pumwani. The strong social and historical bonds to these areas still make many residents regard them as being ‘Pumwani’. As will I for the purpose of this thesis. The following numbered description relates to the map in Figure 6.1.

### **A professionally influenced description?**

Pumwani is located directly Northeast of the city centre (1), on the Northern banks of the Nairobi River (2). The area is elongated, stretching from Muinami Street (3) in the East to Lumbwa Street (4) and Meru Road (5) in the West. Towards the North Pumwani is confined by the walls belonging to Starehe Ward (6), and Pumwani’s Northern tip ends in General Waruinge Street (7).

Figure 6.1 Map of Pumwani. >



In the South-western sliver of Pumwani, straddling the Nairobi River and stretching towards the city centre, is Gikomba Market (8), which having started small around 1972 has since grown and expanded into Gorofani (9) and Bondeni (10), two housing locations built in the 1950s. Gikomba has also spilled over the river on a small footbridge (11), blending with the Jua Kali

industries on in Shauri Moyo (12) on the Southern banks of Nairobi River; and housing estate from 1938.

There are also a few developments in the East, which for historical and socio-economic reasons have strong connections to Pumwani; these are California (13), Biafra (14) built as part of the Pumwani redevelopment schemes

New Mosque  
under construction

New, multi-storey  
shopping on Mosque land

Old Social Hall,  
still used for some activities

Original Majengo  
housing from the 1920s

Extensions and infills  
Most built after independence

The city 'proper'

Starehe Garden City  
social housing  
scheme from the 1940s



introduced in 1968. To the far South and East are the temporary “villages” Kitui (15), Konuku (16), and Kinyago (17). These settlements were illegally put up by landless squatters from 1966 onwards. Moi Airbase (18), the historical main airport in Nairobi - now a military airbase, cuts into and divides these easternmost developments on the border to Pumwani. Disputes over this boundary have led to a number of demolitions of structures in Kitui and Biafra by authorities, reportedly for reasons of air traffic security.

Historical Pumwani (19) was established in 1922 and was the first official African location in Nairobi. The location was divided into three neighbourhoods: Sofia (20), Mashimoni (21), and Digo (22), but with time other neighbourhood names have sprung up. Pumwani was built by local residents on plots allocated by the city council. The settlement was supposed to be temporary, and homes were constructed in mud and wattle in what was known as Swahili Style or Majengo Style. The signature pitched roofs are still visible today (Figure 6.2). The old historical centre of Pumwani has since been known as Majengo. Despite the temporary plans, the structures are still there, with numerous extensions and reworkings having been done to them in their 90 years of existence (Figure 6.3). Pumwani is still considered a temporary housing area, and very few permanent structures have been erected.

Of the permanent institutions and structures that have emerged in Pumwani, a number of them were built as early as the 1920s. Pumwani Maternity Hospital (23) in the far North of Pumwani, was erected in 1927 and is considered a major Kenyan institution. St John’s church, an Anglican church (24), was erected (and later rebuilt) in the 1920s. St. John’s Community Centre (25) established their activities as part of the Church Missionary Society in 1957, and have since been an influential NGO in the community. In 1958 they were responsible for establishing the Christian Industrial Training Centre (26) on the adjacent plot. There are also a series of church flats (27) for the church and missionary employees. The entire area is walled off from the rest of Pumwani, with entrances from the West along Lamu Road, and East along Muinami Street. The Highrise flats (28) just South of the Church housing developments is a social housing scheme developed by the Nairobi City Council (NCC). The plans for the scheme were initiated in 1987, and were partially finalised in 2002. Temporarily halted due to

< Figure 6.2 Pumwani, Sofia (20) in 2012 with new Riyadhha Mosque (31) in background to the left. The elongated shape the old Pumwani Memorial Hall (30) is visible to the immediate right of the Mosque. Nairobi CBD (1) visible in far background. Photo taken from the top of permanent material building (39) along Lamu Rd (author).



Figure 6.3 Numerous extensions to the original layout create a maze of alleyways (author).

lack of finances, the Highrise scheme was supposed to cover the entirety of what is today known as Bash (29) (Figure 6.4). Because of the expensive rents in Highrise few of its flat owners or tenants are original Pumwani residents, despite the scheme being intended for people from Pumwani. The other large housing scheme developed by the NCC is California Estate initiated as The Pumwani Urban Renewal Scheme Phase I. Established just after independence in 1968, the housing estate is partially located outside of Pumwani. Also here, due to rents being several times higher than in Pumwani, few Pumwani residents can afford to live in California. The Pumwani Relief Scheme, later called Biafra, was constructed by the NCC shortly after California in an attempt to provide cheaper housing for residents that were evicted as a result of the construction of California.

Pumwani Memorial Hall (Social Hall) (30) was established in 1924 at the heart of Pumwani, and has housed a number of important activities



for Pumwani residents, including a movie theatre, a reading room and library, committee rooms, a tearoom, and recreational rooms. The building is still in active use today. The Riyadha Mosque (31) is today the highest building in Pumwani, having been substantially remodelled in 2007 with final constructions currently taking place. The building is in many ways a monument to the strong Muslim and Coastal Swahili influence in Pumwani that relates back to before Pumwani was established, when Coastal Swahilis travelled with the British settlers to the new town of Nairobi at the turn of the Century. These Swahili people were the original inhabitants and house owners in Pumwani, building the first stone Mosque in Pumwani close to the current site in 1935. The Muslim society have together with latter Christian groups, and (Kikuyu) businessmen and entrepreneurs, been fulcrums in shaping Pumwani both historically and presently.

Other permanent structures in Pumwani include a series of two storied, council-owned retirement homes (32) in Digo, built in the 1950s. Although not listed as permanent, of equal social importance to Pumwani is the Undungu Society (33) on the corner of Digo and Lamu Roads, today serving as a training and schooling facility through NGOs such as St John's. The building was constructed in 1923 and used to house a brewery, established to serve African residents in Nairobi up until 1963. In addition, an interesting structure can be found on the opposite street corner, the Ukumbushu Hall (34), built as a Muslim Community Centre around 1957. It now houses a kindergarten and adult training facilities. At the back the old beer gardens (35) were located while the brewery existed.

Of permanent, commercial structures there are shops (36) along Digo Road in Gorofani Bondeni, opposite Gikomba Market and the District Officer (37). In addition a multi-storied shopping complex (38) has been erected in recent years on the Southeast corner of the junction just opposite the Social Hall and Gikomba Market, on land belonging to the Mosque. Other two-storied, permanent commercial structures (39) are starting to crop up along Lamu Road opposite the Highrise flats, although it is unclear as to the legality of these structures in terms of existing building codes.

In the western part of Digo Road is Solidarity House (40), which today houses The Central Organization of Trade Unions (COTU)K. It was built by the Kenya Federation of Labour headed by politician and union leader Tom Mboya who initiated the building of the centre in 1960.

Other commercial activities of note are the wood carvers located next to Nairobi River in Digo (41). Fenced off from the rest of Pumwani the wood carvers work in a co-op, selling their products to the large shopping malls and curio stalls in more accessible locations for tourists.



Figure 6.4 Soon to be demolished (?) Majengo houses in Bash, surrounded by the new Highrise flats (author).

### Questions

This narrative offers some insight into what and where Pumwani is. It also begs a number of questions. For instance, what kind of influence does the Swahili community hold over Pumwani? What is the relationship between Christian and Muslim groups? What is the significance of the union, and what are possible political connections? Why are there several redevelopment schemes, and why only in some areas? Why are some areas still considered temporary after 90 years of existence? And importantly, as possible to ask of any description, be it from an NGO, novelist, local resident, or academic: what is the motivation for this particular mapping? What does this example add to the 'discourse' on Pumwani that other points of view do not present? How is it constructed, what are the sources of information, and can they be substantiated?

In order to answer such questions we need to dig deeper into the dynamics of the settlement. From the suggested synthesis of mapping methods described in Chapter Five, it is to the areas history we now have to turn in order to unravel some of the questions raised.

## 7. Mapping Pumwani's histories

In many mapping exercises by planners, current issues are at the forefront of investigation. Links are seldom made between what *is occurring* and what *has occurred*. Given that mapping from a planner's perspective often is about creating a platform for suggesting what is *going to occur*, there is reason to ask if not historical mapping should be a more central part of planners' mapping exercises, as it allows us to see current events as rooted in historical contexts, and allows us to better understand what may occur in the future. As noted in Chapter One, the lack of connection between past, present, and future is exemplified by one of the most common methods of historical 'analysis' so often contained within mapping exercises such as baseline studies, PUAs, or RUSPs: *the timeline*, a listing of events and dates – often in shorthand, sometimes with visual aids – that are well suited for quick overviews and reference, but offer little in the way of analysis (Figure 7.1).

Also discussed in Chapter One, is the importance of the many contributions to understanding the African city by academics researching historical processes of urbanisation. These can be on a thematic basis such as White's study of prostitution in Nairobi (1990), or research on overarching historical developments leading to the formation of urban form as covered by Hutton (1972).

This chapter examines the depth and complexity an historical analysis can add to a mapping and planning exercise, and tries to make clear the multiple connections between events long past (as well as more recent) and today's Pumwani. It attempts to lay bare the reasons for including a thorough and pointed historical analysis in mapping exercises, one being that historical events and groups are crucial to the working of today's community, and that attempts at analysing current developments in a community should start with a history. And by extension, a second reason for including an historical analysis in mapping exercises is that through an understanding of historical events and social mechanisms, planners are better equipped to gauge the effects and consequences – both intended and unintended – of suggested interventions.

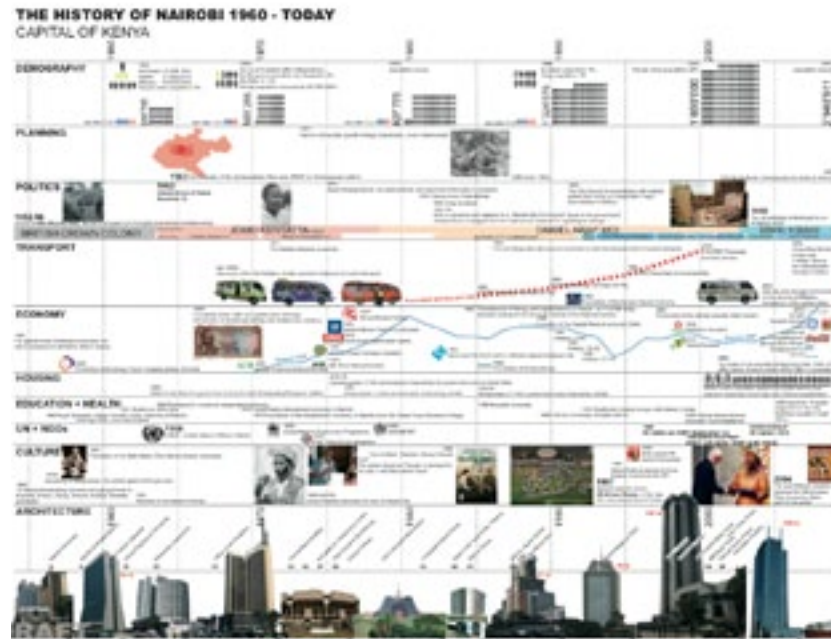


Figure 7.1 An example of a timeline history with emphasis on visuals (ETH, Studio Basel 2008).

I have chosen to divide the analysis into four periods; early years from 1899 to 1922, a period before Pumwani was established, but important in order to understand who it was that settled in the location; the rise of Pumwani from 1922 to 1939, describing the establishment of groups and occurrence of events that have been pivotal to the development of Pumwani ever since; resistance and power struggles from 1939 to 1969, describing a period of unrest and internal struggle, but also of the rise of political awareness and a drive towards stability, and finally; redevelopments and aid from 1963 to present, which deals with how social housing schemes have changed Pumwani, and how new stabilising structures have taken over from historical ones. I have chosen these periods in order to better highlight major events and tendencies in the settlement, and to highlight the shifts between periods and how different groups have adopted accordingly. This connectivity between periods – and its issues and groups – has been helpful to structuring the next chapter: the analysis of the current situation in Pumwani.

Any attempts at interventions in the community by planners need to be done with a clear understanding of the areas history. This understanding will of course be influenced by the type of historical analysis carried out. In this case, the analysis highlights the roles of social groups when explaining the

causal effects of historical events. The analysis makes clear the importance of various social groups in creating identity, community, and to a certain degree prosperity in Pumwani. It also highlights the differences, disparities, and power struggles between social groups. As a result, the mapping of the current situation in Pumwani derives its structure and logic from this particular way of analysing historical events. As with all mapping exercises, this analysis is not neutral, though it attempts to explain and make clear the analytical and structuring choices made. Providing such information could be of value to potential readers of the mapping exercise.

## HISTORICAL ANALYSIS

### Early years - 1899 to 1922

With the establishment of Nairobi as a railway hub and administrative centre for the region at the turn of the previous century, African labour flocked to the young town. Not only was it possible to obtain formal work in Nairobi. The growing town was also a market for informal labour and services. In short, Nairobi presented itself with a number of possibilities for people in a region that had been hard hit by disease and drought during the last decade of the 19<sup>th</sup> Century. It is this labour force that many historical sources point to as a key component of the African population that were to make up the brunt of Pumwani's population. But through a more nuanced look at the make up of this labour force a number of other, parallel histories emerge; histories that are of importance when discussing who it is that today's residents in Pumwani hail from, and which values and allegiances, and which possibilities and limitations they were raised into. The initial African labour force in Nairobi brought with it a series of relations that were to form the build up of the early day communities on the Northern banks of Nairobi River. These settlements were initially illegal, but with time, some were granted the right of existence in what can best be described as a pragmatic approach to town's need for easily accessible labour (McVicar 1969, 9; Bujra 1972, 51). This pragmatic approach to African settlements can be seen as persisting up until today, with Pumwani entering it's 90<sup>th</sup> year, still with the formal status of being a temporary settlement.

Though most of the labour force flocking to Nairobi in the beginning of the 1900s were men, women also followed, often serving subsidiary - but much needed - roles as traders, cooks, brewers, and prostitutes. Though women were not encouraged to enter the town, the administration only half-heartedly dealt with the problem. Sources (White 1990; Robertson 1998) suggests that due to the unbalanced social build up of the early African population as being mostly male, the few women who established themselves in early Nairobi were able to do so because the niches they carved out provided services the administration itself was unable or unwilling to fulfil. Prostitution was

likewise considered to provide men with 'a home away from home', where it is important to note that apart from sexual services, the women provided a number of household services to the male labour force (White 1990). Sources from colonial archives also suggest that there existed a partial *laissez faire* approach to the subject matter by authorities (White 1986, 255). Many of the families living in Pumwani today are decedents of early trader women and prostitutes. The role and standing of some of these women and their decedents are important to understand in light of this particular history.

These first African settlements, located across the Nairobi River, just a few kilometres to the North East of the town centre, comprised more than half of the African workforce in Nairobi<sup>1</sup>. Before the 1920s the administration's involvement in the on-goings in the African settlements surrounding the town was limited, and many of these early settlements could be described as semi-autonomous, driven by the logic of commerce and labour interests rather than bye-laws and planning regulations. This meant that the social systems that were put in place in settlements were by and large African institutions. And even though colonial control was slowly enforced in the years before 1922, these urban African social frameworks were partially transferred to social relations in Pumwani. But why was colonial control initially limited? Because the African population was viewed as being transitory in that they were to return to their rural locations after ending their contract. This logic influenced the administrations lack of planning for housing, infrastructure, and amenities to support a growing labour force that was becoming increasingly un-transitory and urban. It left it to the Muslim community to provide informal services for the steadily growing urban population (White 1990).

The Muslim population - especially those with ties to the Swahili coast - were among the most urban of Africans, and were in an advantageous position in terms of their relationship to the administration. Muslims were early on to play an exceedingly important role in the African settlements because they represented to the colonial administration an inroad to partial control over an African urbanisation process that was increasingly becoming uncontrollable. The 'intimate' relationship between the colonial authorities and the Muslim population was established decades earlier with the colonisation of the Swahili coast. The Swahili Muslims who initially settled in Nairobi came to the interior as a part of the Colonial push inland. The Swahili Muslims were loyal to the British in their conquest of East Africa. They were seen - by themselves as well as Europeans - as superior to the inland ethnic groups in terms of language, religion, and culture (Huxley 1986, 14). The Swahili Muslims were seen as important allies to the British in the quest for colonial expansion. After the establishment of Nairobi, Swahili Muslims would come as traders and servants to settle in the new town (Nzibo 1986/87).

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1 The rest living illegally in the Indian Bazaar and River Road (Parker 1948, 83).

The early Muslim servant class were among the first to allowed to settle on the fringes of Nairobi (McVicar 1969). As house-owners many Muslims became landlords in a city where the housing shortage was acute. Such developments allowed for a Muslim over class to emerge, straddling the power gap between the African labour force and the white bourgeoisie. In Nairobi, Muslim elders were appointed as headmen of the various African settlements by the colonial administration. The role of Muslims and the importance of Swahili culture in forming early African settlements have been partially overlooked by some researchers that have focussed on issues of trade and labour in Nairobi. Despite of their power being contested and dwindling in the decades after the Second World War, parts of the Muslim population still holds key positions in Pumwani society today. Long-time Pumwani residents might describe newcomers (many of whom come from rural areas) as ignorant if they publicly make use of languages other than Swahili. Swahili traditional gowns - emblematic of the Muslim dominant classes - are still popular garments, even among the non-Muslim population. The names of existing settlements as well as those long gone, such as Pumwani, Pangani, and Mji wa Mombasa bear reference to Coastal geographies. The original wattle and mud houses of Pumwani, many of which still stand after 90 years, are referred to as Majengo Houses<sup>2</sup>, their signature pitched roofs and ground floor layout being similar to the 'Swahili' houses found along the Coast.

In addition to early African stratification of classes and social groups (with ethnic undertows), other issues that increased the gap between the African settlements and the town proper was the increasing administrative concern with the growing population and sanitation problems it posed (Parker 1948, 78-79). This concern was paramount to the later creation of Pumwani. Living conditions in the early settlements, as well as in the Indian Bazaar were far from salubrious. Between 1901 to 1916 there were 7 outbreaks of plague in Nairobi, much due to overcrowding in the Asian area of the town as well as the lack of water-born sewerage systems, and insufficient drainage in an area that used to be, in part, a marsh. These considerations were used tactically in the Sanitary Commission Report of 1913, and The Simpson Health Report of 1913-1914, recommending the zoning and racial segregation of African, Asian, and European into separate communities and residential areas (Nangulu-Ayuku 2000).

As ideas of segregation became influential in colonial city planning, the administration made attempts at controlling African settlement. Under the auspices of the authorities some steps were taken to improve sanitary conditions in the segregated African settlements, as well as making allowances for local construction of more houses. By 1917 conditions had not improved, as the negative effects of the increasing African population after the end of World War I far exceeded any measures taken by authorities

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2 The mix of English and Swahili literally means 'house houses'.

to alleviate the situation. The increasing severity of the situation forced the administration into action. For there to be a proper change in living conditions (improving the quality of the labour force), existing settlements had to be demolished and new locations had to be built. It is in direct relation to these events that initial plans for Pumwani location were drawn up. As a part of these plans the system of self-building (perhaps the first sites-and-services scheme in East Africa), important to the physical and socio-economic fabric of Pumwani, was introduced.

A final important factor that required authorities to exercise control over developments in African settlements in Nairobi was the growing discontent among the African educated elites; the formation of political organisations such as the Kikuyu Association, as well as more militant fractions such as the East African Association (EAA)<sup>3</sup>. In 1922, Harry Thuku, one of the leaders of the EAA was arrested after strikes and unrest. 8 000 followers, who saw Thuku as their champion, demonstrated outside Nairobi Prison for Thuku to be released (Spencer 1985, 37-41; Thuku 1970). It was in this atmosphere of growing opposition to the Colonial Government that the new African location, Pumwani, had its beginning.

### **The rise of Pumwani - 1922 to 1939**

The realisation on part of the colonial administration that control over the growing African urban population was only feasible if they were contained within one African location had unintended consequences that came to shape future events in Pumwani. Ironically, the logic of segregation practiced to separate European, Asian, and African races lead to Pumwani's population being highly heterogeneous. Africans of a variety of different ethnical, social, and skills-based backgrounds were brought together and forced to co-exist. Pumwani housed business men, small scale entrepreneurs, clerks, industrial workers, petty traders, teachers, cooks, maids, prostitutes, and more, hailing from variety of geographies: coastal regions, The Rift Valley, Lake Victoria, as well as countries such as Tanzania, Uganda, and the Congo (Spencer 1985, 29-32). And just as their backgrounds were different, so were their outlooks and possibilities.

By inadvertent decree of the colonial government, wishing to centralise their access to labour, Pumwani thus became that most urban of situations: a melting pot. The multiplicity of Pumwani, with people of diverse backgrounds and skill sets meant that Pumwani residents already in the settlement's initial years had a solid platform on which to build an African form of urbanity. This multiplicity, coupled with the already established self-rule in previous settlements along the Northern banks of the Nairobi River, as

well as an initial refusal by the authorities to take responsibility for African urban areas, allowed for a greater control of on-goings within Pumwani by residents themselves. This sense of autonomy materialised in the original housing stock in Pumwani. The municipality laid out pre-planned plots and basic infrastructure. The temporary Majengo style housing with whitewashed mud and wattle walls and corrugated iron roofs were built by residents themselves.

The administration's initial dislike for dealing with housing issues in Pumwani also needs to be seen in relation to their non-acceptance of permanent African urban residencies. Up until the end of the 1930s, the administration considered the African workforce as only residing in Nairobi for the duration of their work period. But as the city grew and buildings were constructed, as grew the demand for unskilled labour. As more labourers sought employment in the city, the administration in turn sought greater control over their residency there; initial pass laws were enforced in 1918, and were made increasingly tougher in the decades to come; wages in the city were kept low to dissuade people from moving into the city seeking employment. In terms of housing only a few thousand Council and Government workers had been catered for by the authorities by the end of the 1920s (Kariokor and Starehe, see map in Figure 7.3). Housing in these locations were built by the Council rather than letting residents build for themselves as was the case in early Pumwani (Parker 1948, 83-86).

The financial crisis of 1929 and its negative impact on the job market did dissuade some Africans from migrating to Nairobi. Nonetheless, by the mid 1930s, the African urban population was expanding yet again (Parker 1948). Concerns were raised in the administration that the provision of salubrious housing only sought to encourage rural-urban migration. In this respect negatives such as overcrowding, lack of housing, and lack of services was seen as a 'tool' for the administration in keeping the size of the urban population in check (Parker 1948). The detrimental effects such ideas had on conditions in places such as Pumwani, and the deliberate lack of involvement on the part of the authorities proved important to the further development of the community. It created a vacuum that several African power structures could inhabit - some already existing, and some in the process of being formed. Muslim power structures hailed from century old coastal cultures, while other interest groups represented an emerging proletariat in the city. Between such fractions the internal distribution of power among African groups in Pumwani was tiered, and sometimes contested. Muslim leaders that were close to the colonial administration were granted influential positions in

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<sup>3</sup> Established in 1919.

Pumwani affairs, as middlemen between the colony and its workforce (Bujra 1972, 58). Muslims quickly became landlords in Pumwani, as only a few of the inhabitants were granted housing.

Through property and business ownership Muslims were able to consolidate their power in Pumwani. Though Muslims were a diverse group with internal differences, they dominated Pumwani through language and culture.

Other fractions emerged between business and politics. The KCA was the only political party recognised by the Colonial regime. They stood strong in Pumwani from the late 1920s. Nominally Kikuyu-based and moderate, they attracted business interests as well as a growing group of young, well-educated, Christian government employees. Though moderate, they were in opposition to Colonial politics and as such also became representatives for the unemployed and underpaid African workforce (Spencer 1985, 57).

These emerging power structures were sometimes in opposition to one another; sometimes based on ethnical and religious division lines, but also due to class-based divisions. The structures that emerged can still be found in Pumwani today.

But although differences were present, there were also common interests. Businesses were best served by a balancing out of the plethora of dynamic impulses brought to the newly established location by its inhabitants on the one hand, and on the other: stability - both internally and in relation to the city. This historic need for stability sheds new light on the sense of unity - *ujamaa* - that has persisted in Pumwani until today. *Ujamaa* is concept that is central to Swahili culture, and was a natural part of the baggage Coastal Muslims brought to Nairobi. Apart from such socio-cultural explanations, the curiously strong notion of *ujamaa* in modern day Pumwani may have been aided by other factors as well: in an urban poor area such as Pumwani, typically associated with volatility both then and now, notions of *ujamaa*, cohesion, and stability may well have been underpinned by commercial interests that sought to build community relations when colonial administrative interventions were found wanting. In the spirit of *ujamaa*, the house owning elite and up and coming bourgeoisie, together with the old Muslim networks “whose loyalties (were) directed towards the town”, were responsible for the “first step in the formation of a healthy urban society” in that they supported newcomers and those the formal sector saw as redundant (White 1990, 212). Newcomers to Nairobi converting to Islam were supported by a social safety net by the Muslim elite. Food and housing provided a basis on which newcomers to the city could start a new life (White 1990, 58-64). Newcomers to Nairobi quickly saw how Swahili affiliation was closely linked to urbanity. Conversions to Islam were thus frequent in the initial years of Pumwani’s existence, lending a sense of distinction and knowledge to those that converted.

The cohesiveness provided by Muslim culture opened up possibilities for otherwise marginalised groups such as prostitutes to gain footing within Pumwani. Many prostitutes were converts, or originally from coastal areas. They also became part of the propertied class, as house ownership was important to their trade (White 1990, 34). In the 1920s and early 1930s prostitution was a lucrative business. Wage labourers, almost exclusively male, who were allowed to reside in the city, were not allowed to bring their families. Prostitutes in Pumwani and elsewhere therefore played an important role as spouse substitutes in the way of cooking and catering for a lone, working male population: in White’s words, “mirroring the material conditions” in Nairobi at the time (1990, 39).

There quickly developed a distinction between landlords, landladies and their tenants. Not only were the differences that one group was propertied and the other non-propertied, but in addition these groups are separated by their duration of residence in Pumwani, as many landlords were original settlers, while many tenants came to Pumwani at a later stage. Systems of tenure were developed whereby those tenants that had stayed in Pumwani the longest (with the same landlord) were given rebates on their rent (White 1990, 81). Developments like these, though in essence exacerbating differences between long-term residents and newcomers, also helped cement social relations between landlords and long-term tenants, thus proving to be a stabilising effect for the community as a whole. Though the population in Pumwani kept growing, original resident groups persisted, kept in place not only by pass laws, but in addition, by the 1940s when other locations were made available, loyalty to Pumwani can be attributed to socio-economic factors such as the rent-system, as well as ideas of cohesion offered by the new location’s Swahilified urban identity. Such factors and ideas did not only create a home for those Africans that before the Second World War had little or no connections to the rural areas; in the face of the tumultuous times that were to come, such factors and ideas were also the seed to a growing and steadfast conservatism. The urban social fabric of Pumwani is today still a blend of differences and segregating factors, as well as common bonds and unity; Pumwani still houses the poorest of the poor, as well as being home to successful businessmen with tentacle reaches into national politics; the old rent-discount systems is still in place, with landlord-tenant relationships and sometimes friendships going back three generations.

Another factor deeply affecting the social and physical build up of Pumwani was ownership: house-owners were given residency and the possibility to build through a system of allotment letters (McVicar 1969, 105). The

letters provided (and still provide) a contract between the city council and the house-owner. The letter gives the landlord right of ownership of the structure(s) the person erects on the allocated plot. The plot itself, however, was and is owned by the City Council and leased to the house owner. This is a crucial point to ownership relations in Pumwani, and has had unintended ramifications - many of which have ultimately proven to be positive for Pumwani's residents. Though the system gives the City Council ultimate power in Pumwani, the Council have seemingly not been interested in developing Pumwani for commercial purposes (despite it having been prime land in the city for decades), perhaps tied by the still existing redevelopment and social housing schemes. In later years the system has given Pumwani residents an edge in dealing with pressure from private developers. To limit the number of African participants in property market, the allotment letter system disallowed sale and purchase of property, allowing landlords to only pass on their property to rightful heirs (White 1990, 115-124). The law still persists in Pumwani, although corrupt practices make room for the odd sale and purchase to be made from time to time (respondents BS 2012; JS 2012; RMC 2012).

The new law resulted in two major changes visible in Pumwani even today; while surrounding areas have been the object of speculation from private developers, displacing small-scale, generation old landlord-tenant relations, Pumwani has for now remained unscathed, retaining its important (but increasingly precarious) decade long bonds of social cohesion; and while other urban poor areas in Nairobi spiralled into increasingly crass class divisions between economically and politically powerful slumlords and their disenfranchised tenants, Pumwani's landlord-tenant divisions have been less pronounced, partly due to landlords and landladies not being able to amass property. In addition their one house is often passed down three generations, whereby original entrepreneurial aspirations have disappeared. House-owners in Pumwani can become landlords as a repercussion of law and kinship rather than by choice.

### **Resistance and power struggles - 1939 to 1963**

By the beginning of the Second World War the colonial administration was starting to change its policies concerning African labour in Nairobi and their housing needs. Production demands and economic stability dictated that a trained and stable labour force was increasingly preferred to transitory labour. This lay the grounds for establishing housing estates for workers and their families, as opposed to the male worker dormitory provisions of earlier. With growing hardships of labour and disenfranchisement of lands among rural populations working on highland farms, urban life was increasingly

the only option for a growing proportion of the Kenyan population. The war had demanded a shift of production and labour in Kenya to cater for the war machine overseas, amongst others producing sisal and pyrethrum for the Americans. At the end of the war the 'normalisation' of production meant a return to congested reserves and lower wages for a large portion of the African population. These unsatisfactory conditions on the reserves, coupled with a young wartime population "less parochial in outlook" (Lewis 2000, 245) made attempts at repatriation of Africans to the countryside less successful. The African population in Nairobi increased, as did building activity for the African labour force and their families. The building projects were still based on the logic of segregation, but in order to better facilitate for economic progress, the projects were more integrated in the urban fabric than earlier (see e.g. developments from map Figure 7.3 to map Figure 7.4).

The administration was taking greater responsibility in catering for the African population. By the start of the Second World War there were two official locations for Africans in Nairobi: Pumwani and Shauri Moyo (designed for 9 000 residents, but catering for 15 000 by 1939 (Hake 1977, 51))<sup>4</sup>. Between 1942-1948, four new housing areas for around 10-11 000 people were under construction, all being financed through public funds (Parker 1949, 96).

But economic limitations hindered the administration's ability to provide sufficient housing, given the sharp rate of urbanisation. In 1946 the Ogilvie Report estimated that there were 65 000 Africans residing in Nairobi (1946, 13). The lack of provision of housing resulted in overcrowding in the already established African housing areas. Pumwani landlords were providing the city with a valuable service by keeping the overflow African workforce housed. This gave the propertied class a heightened position both as landlords in Pumwani as well as in relation to the city.

Landlords were not the only African group to distinguish themselves in terms of social standing. Certain social and economic differences were detectable between tenants in the various African estates and locations in Eastlands. Residents in the new estates were generally more skilled with a higher degree of education and better jobs, making them able to pay higher rents. Those who were unskilled or unemployed sought rooms in Pumwani or Shauri Moyo (as well as in unofficial and illegal places of residence).

The new housing areas were based on Garden City planning principles from Britain. These locations were to work as independent 'institutions', complete with their own social halls, post offices, shops, gardens, schools, nurseries,

<sup>4</sup> In addition there were housing areas for African government and council employees in Starehe and Kariakor.



Figure 7.2 Aerial view of four phases of social housing in Pumwani and Starehe (Google Earth 2013).

and family housing units. One could argue that these constructed physical surroundings as a result of welfare policies were a party to ‘forcing’ African urbanites in Nairobi to succumb to a lifestyle dictated by the authorities. These physical changes lessened African ability to manoeuvre and organise by their own accord. Later, in the 1950s and 1960s blocks of flats replaced the Garden City plans, but notions of welfare and self-catering remained important (McVicar 1969, 56-57/73).

In Figure 7.2 the aerial view of Pumwani (2013) provides a revealing example of the physical implications of the paradigms dictating the different government approaches to African housing. The image shows four consecutive periods of social housing projects, all with highly distinct footprints and all concentrated around Pumwani. In the middle is 1) the original gridded layout of Pumwani from 1923 is discernible with its brown tin roofs (lighter coloured roofs are infills). To the left is 2) Starehe from 1946 with its Garden City layout. There is a wall separating Pumwani from Starehe, essentially dislocating these two housing areas from each other. To the far right is 3) California from 1964-69, with its modernist blocks of flats with recreational space in between. Between California and Old Pumwani is 4) Highrise from 1984-2004, essentially with the same logic as California, but with higher densities and less recreational spaces.

Not only does the image convey the physical implications of the various schemes. The easily discernable forms of the different projects are iconic of each period’s housing policies.

Social services and welfare became institutionalised in the early 1940s. The Colonial Office established its Social Services in 1939, and was followed by the Colonial Development and Welfare Act in 1940 (Lewis 2000, 22-52). Not only did the administration see the usefulness of organising amenities. As welfare provided a way to increase control over the workforce through provision of amenities, it also became an important buzzword for employers seeking an edge on competition in a post-war market economy (Lewis 2000). Better housing and welfare measures, it was argued, were economically sound investments as would make workers more effective. In as far as the 1948 Master Plan for Nairobi dealt with the African working class and areas like Pumwani, it also underpinned a dual-minded rhetoric of a skilled workforce and repatriation. The logic guiding the vision of the 1948 Master Plan was one of modernism, and in that vision Africans residing in Nairobi were to be fashioned into a pliable working class:

Urban life raises the productive propensities of the population by increasing their needs. Self-sufficiency is replaced by exchange, low satisfaction standards by competitive emulation, pleasure in mere leisure is superseded by a love of active enjoyment. In co-operative factory work and machine tending man learns efficient conduct and logical habits of thought. He acquires skills which spread to the countryside whenever he sets up his own shop in his own Reserve. (Thornton-White et al 1948, 40).

In the case of Pumwani, welfare or “pleasure in mere leisure” was attempted cemented through various buildings and amenities from early on. Already in 1924 Pumwani could boast a social hall (Pumwani Memorial Hall) in addition health facilities, a government school, and later and later an African welfare officer<sup>5</sup>. Pumwani Memorial Hall is still in active use today for social events. It quickly became one of the most important buildings for the community in Pumwani, housing events such as wrestling matches, and dances, with Pumwani’s many organisations and societies holding venues there.

One key amenity that was established was the Beer Hall, located across the road from the earlier constructed brewery. Many of the Native Welfare activities were financed through the activities of beer halls such as the one in Pumwani (Bujra 1972, 13). The brewing of beer and liquor by women in Pumwani and elsewhere was made illegal, and African beer consumption

<sup>5</sup> The health facilities consisted of a children’s clinic and a venereal disease clinic due to the many prostitutes in Pumwani. The government school was built in 1935. These existing amenities were expanded on during the 1940s as a result of the general ‘welfare-push’ in the colonies. Pumwani Memorial Hall housed a cinema, a reading room and library, committee rooms, a tearoom, and recreation rooms. A scout’s restroom and a British Legion restroom were built, as well as a temporary nursery school, an alms house, and a dairy. (Parker 1949, 138).



was brought under formal control of the colonial administration, along with the social activities associated with it, and used by the colonial powers to administer what was seen as suitable amenities for Pumwani's urbanites.

Another tactic used to control urban Africans was to encourage their grouping together according to tribal affiliation in order to "preserve their best traditions" (Lewis 2000, 288). Such ties no doubt cemented the constructed tribal affiliations forced upon African groups under colonial rule. Projects like this ensured that the tribal issue – used by colonial powers as a means of organisation and control – was brought onto the urban arena, and became a universal identity-making tool in the troubles that followed in the wake of the empire and later in post-colonial nation state building. The push towards tribal associations in the urban welfare politics of the colonial administration was an attempt to make better urban policies that were found to be lacking, and shape them in the same vein as rural policies. The administration admitted that the urban form taking shape in Nairobi was of unknown character. Unsure of what measures to take, the British administration looked to rural policies for answers (Lewis 2000, 341). As a result of the unknown character of African urbanism, the administration imbued the African urban population with imagined cultural traits.

The coerced socialisation of Pumwani residents through tribal associations was however not a guarantee against unrest, crime, or political agitation. Throughout the 1940s the colonial authorities had increasingly less control over the internal goings on in the settlement (Anderson 2006, 188). Not only was the population increasing rapidly, they were also becoming politically informed. With no permanent police encampment in place it was difficult to administer control over associations that often served covertly as political sounding boards<sup>6</sup>. Many of Nairobi's unions were established in Pumwani Memorial Hall or close by. Even some of the Muslim associations were critical of government.<sup>7</sup>

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6 Several vocational newspapers announced tea parties, which in truth served as covers for political meetings. Pumwani Memorial Hall was not always used for innocent leisure; it sometimes became the venue for discussing highly contentious matters: "Over 2000 Africans who attended the meeting in the Pumwani Memorial Hall, Nairobi, also decided that copies should go to the Industrial Relations Officer, The resolution being critical to the use of the term 'boy' by employers" (Anderson 2006, 300; EAS 20 Sept 1951).

7 The Bene dancing associations were a Muslim tradition brought to Pumwani in early years. Starting out as an internal cultural expose, by the end of the Second World War, it provided a grounds for more radicalized youth to voice subtle critiques against the administration. While membership in bona fide political organisations was dangerous and could lead to imprisonment, the dancing troupes were a safer way of displaying dissatisfaction with authorities. Criticism was, however, never explicit, and was subtly conveyed as an art form. Whatever socio-political undertones were present; they were covered in humorous overtones (Nzibo, 1986/87).

After the Second World War political awareness spread to a variety of African social groups in Kenya. A Christian educated Nairobi elite were the driving force in terms of political consciousness. Being closely connected to the colonial powers through work and education, they were moderate in their demands for improvements for Africans as well as in their demands for increased political power. In 1944 they established Kenya African Union (KAU). The old association KCA, lead by Kikuyu businessmen and supported by many Kikuyus, had been banned in 1940, but still existed, fighting for land rights. Throughout the 1940s and the beginning of the 1950s the British colonial power showed no sign of taking KAU's demands seriously. This created frustration and gave way to more radical groups. Workers in Mombasa and Nairobi demanded higher wages, better housing, and an end to racial discrimination. They established unions in several parts of the country, went on strike, and held demonstrations. This was seen as a threat to a colonial economy that was dependent on low wages to maintain a competitive edge. At the same time violence and unrest was becoming an increasing problem in the Rift Valley and the Kikuyu Reserve. Rumours of oathing and militant fractions organising abounded, as well as demands for Independence<sup>8</sup>. An act of Emergency was enforced for the entire country on October 20th, 1952. In 1954 Operation Anvil succeeded in shifting or detaining most Kikuyus in Nairobi, and by 1956 the British war machine had reinstated law and order by detaining 320 000 people, and killing 14 000 Africans, mostly Kikuyus and 29 Asians. A total of 95 Europeans were killed. (Hornsby 2012, 47). The Emergency was lifted in 1960. Negotiations for an independent African state was by then well under way.

How did these events affect Pumwani? Major changes took place in Pumwani during the 1950s as a result of 1) increased rural-urban migration, polarising the division between Muslims and non-Muslims, 2) radicalisation and political struggle, that made clear internal social differences in the settlement, 3) the struggle for independence, that lead to Muslim leaders losing power, and 4) Kikuyus (businessmen as well as the unemployed) being forcefully removed from Pumwani, giving room for new groups of residents with no prior affiliation to the settlement or to Nairobi.

Before the war Pumwani was highly influenced by ujamaa and Muslim culture. With the developments in the 1950s this was about to change. Many newcomers to Pumwani were Christians or polytheists from the countryside, or were squatters who had been removed from illegal settlements elsewhere in the city. They had little or no connection to urban life, nor did they have

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8 For more on the history of Mau Mau and the political struggle for independence, see Rosberg and Nottingham (1985), Anderson (2006), and Spencer (1985).

affiliations to Muslim culture. Whereas the Muslim community had provided social security networks for newcomers to Pumwani in the 1920s and 1930s, these new groups turned to other structures for assistance: the emerging unions and militant political fractions. This created the grounds for increased polarisation between newcomers and the old urban groups, especially the Muslim community that were rapidly losing power to more radical and politicised organisations.

In May 1950 a general strike among workers had a paralysing effect on the whole country. 100 000 workers were involved in the 9-day long countrywide strike (Singh 1969). Many of the strikers and its leaders were from Pumwani, with many of the rallies and clashes between unions and police taking place there or in Kamakunji grounds, on the South side of Nairobi River between Pumwani and Shauri Moyo. Intrinsically connected to Pumwani, these unions and organisations were not only involved with the rights and conditions of workers, but ultimately also to the struggle for independence from the colonial power. Based on available historical sources, it is possible to reflect some on the effects of the struggle on Pumwani. Because its residents represented multiple shades of the struggle, internal conditions in Pumwani became increasingly difficult throughout the 1950s<sup>9</sup>. Mau Mau support in Pumwani certainly existed, but support varied with the variant takes on the struggle. Groups affiliated with Mau Mau were bound loosely together with little or no common rhetoric or politics. Mau Mau was born out of Kikuyu insurgency, mostly aimed against colonial land grabbing in the Highlands and the areas surrounding Nairobi.

Although fuelled by mostly rural land rights issues, the strong Kikuyu base in Pumwani was sympathetic to the cause, and some joined in the fighting or in assisting fighters, seeing the land-based struggle as parallel to the struggle against the oppressive conditions under which the urban population and workforce lived. At the same time, many living in Pumwani were second-generation urbanites. To them Mau Mau's rural based lands claim was in some respects a subsidiary concern. Many of the regular tenants in Pumwani lost sympathy with the Mau Mau in light of some of their more brutal strategies. Raids from both authorities and insurgents were frequent, with violence and crime at an all time high. Muslim tenants seem to have been averse to the Mau Mau struggle, seeing it as against their religion. Informants existed on both sides, making it dangerous to harbour activists - or to

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<sup>9</sup> By April 1954 Mau Mau and other oppositional groups had become such a problem for the colonial administration that Pumwani and adjacent settlements were fenced off from the city by barbed wire, with no-one leaving "except in the back of a caged lorry" (Anderson 2006, 201).

fraternise with the authorities. Many people did however show openly their sympathies, proving that in some areas of Pumwani it was easier to know which side people were on<sup>10</sup>.

Pumwani landlords and businessmen were opposed to the struggle because they lost out due to the political and economic instability. Many Muslim landlords and businessmen were enlisted by the Home Guard in an attempt to control the situation from the inside. Some of them were assassinated as a result. But there were also other businessmen in Pumwani who opposed Mau Mau. These were not necessarily in support of government, but were rather sympathetic to KCA and KAU, with their more moderate demands of change and increased African power. Pumwani businessmen were a composite but influential group. Of a total of 172 shops in all African locations in Nairobi in 1949, 132 were found in Pumwani (Parker 1949, 138). These shop owners and businessmen were made up of not only Coastal Muslims. They were also Kamba, Kikuyu, and Kalenjin peoples. Some of these were Muslim converts, others were Christians. Their interests were also diverse: the Muslim groups were connected to the colonial administration through their roles as local committee leaders, providing them with local power. Other businessmen were held back by a discriminating judicial system with regard to property and business ownership. Some were politically active, others were not. As with other groups in Pumwani, different ethnical, religious, social, and political agendas meant that there were few common interests to unite Pumwani business owners. Government tactics during the Emergency utilised and exacerbated these differences.

Operation Anvil and other detention schemes were a success in that they to a large degree managed to cull Kikuyu support for Mau Mau in Pumwani and other locations. As several thousand Kikuyu were removed from Pumwani and "new blood" was injected in the form of Luos and other ethnic groups, these had little connection to Mau Mau's land based claim. Many Luos were also enlisted in the Home Guard. By April 1954 many Kikuyu had lost their businesses. In Pumwani all Kikuyu shops had been closed after a shooting incident and few were allowed to reopen. Some of these shops may have been handed over to other Africans by officials, but it is also possible that some remained closed in an effort to reduce the total number of businesses in Pumwani (Anderson 2006, 220).

By 1956-57 the Mau Mau rebellion was crushed. Law and order was to be reinstated, while negotiations regarding the handover of power to the African political elite was initiated. In Pumwani, restoration of order was vital to one

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<sup>10</sup> See Bujra (1972, 65-74) for more on conditions in Pumwani at the time.

group in particular, the Muslim petty bourgeoisie (businessmen, landlords, and landladies) who had, through a number of decades consolidated their power in Pumwani based on their position as property owners and a 'ruling class' with economic power (Bujra 1972, 58).

The petty bourgeoisie shared their interest with the administration, whose tactics were of the 'whip and carrot' kind in order to ensure stability and order. Firstly, the removal of unwanted 'rebellious' Kikuyu elements was attained through Emergency measures, and secondly the remaining population was sought appeased through an intent focus on welfare and modernisation measures in the settlements. While the barbed wire surrounding Pumwani was taken down in 1956-57, the Memorial Hall aired no less than 500 feature films, held 110 dances, and called 300 meetings (Frederiksen 1994). In addition, residents could sign up for regular evening classes in economy, spinning and weaving, and health and hygiene. Exhibitions were held regularly, so were tea parties and sports events. In 1958 Kenya's first (?) jukebox was installed in Pumwani.

Other stabilising entities were also starting to make their mark in Pumwani. The Anglican based Christian Mission Society (CMS), though long standing in the area, launched its operational branch – St John's Community Centre in 1957 (St John's Community Centre 2013). Prior to this the Mission Society had focussed introvertly on its small congregation, and had few dealings with those who did not worship. During the 1940s CMS established an elementary school in Pumwani, but as more Christians established themselves in the settlement, St John's Community Centre was founded to respond to the social and economic problems of residents. In 1958 CMS further established the Christian Industrial Training Centres adjacent to St John's (Christian Industrial Training Centres 2013). Charity and skills education became paramount tasks for years to come. Their continuing commitment to assisting the poor in Pumwani has made St John's Community Centre a key institution in the settlement.

From the 1950s onwards the old Muslim-based culture and power hegemony in Pumwani was increasingly contested by welfare and modernisation represented by the administration, and charity and skills training represented by the Church. Nonetheless, the Muslim bourgeoisie seems to have maintained much of its power and standing through internal community work and identity building, providing financial loans for its own, providing schooling and assistance and housing for the Muslim elderly. Together with the new forms of amenities and activities provided by Christian and governmental institutions, Pumwani society was successfully restored to order and function – if compared to other popular settlements in Nairobi at

the time. Both Christian and Muslim conservative values – ingrained in the history and longevity of Pumwani, and to a large extent carried forward by the elite groups in the community – were pivotal to achieving this status quo and sense of unity that the brunt of Pumwani's population take pride in despite their poverty.

### **Redevelopment schemes and aid - 1963 to present**

As many sources note, with the transition of power from colonial to post-colonial governments, the post-colonial power elite inherited the spatial logic of the colonial city, and with it the sentiments of colonial urban policies (e.g. Nevanlinna 1996; Anyamba 2006). For example, Nairobi continued to be planned according to the logic of this segregated city (Nevanlinna 1996), but the post-colonial city came to be divided by class and wealth rather than by race. To a certain extent these new division lines of class and wealth coincided geographically with the old racial division lines. The Nairobi City Council committed (and still commit) to these divisions: the Nairobi Master Plan of 1948, the Metropolitan Growth Strategy of 1973, and the 2008 Metro 2030 Vision, all focus on building a thriving global, business-oriented metropolis, and less on tackling the reality of Nairobi's urban poor settlements. In the early post-independence era this was made apparent by the effects of new regulations and building schemes: people had a law-given right to buy homes and settle anywhere in the city. But most Africans, even the upper middle class, still remained in their old neighbourhoods in Eastlands because it was the only place they could afford to live. The economic discord between the type of housing the city was offering and what people could afford did not seem to thwart the new government from pressing on with plans for building expensive high quality housing, and demolishing those parts of the city that were considered shameful reminders of the inferiority of Africans during the colonial period.

One of the biggest challenges facing NCC in the housing sector in the years after independence was rural-urban migration. Despite a high rate of building activity, the NCC was unable to keep up with demands. One reason was that the NCC did not target their building schemes for the income group where the demand was the highest (Hake 1977, 85). Most building schemes catered for educated people and skilled workers: people with jobs and steady incomes who could afford the type of housing provided. However, most immigrants to Nairobi were unskilled labourers with little income. Many of these immigrants settled in rapidly growing illegal settlements – settlements that the NCC was planning to eradicate with their redevelopment schemes. Demolitions of settlements and slums started as early as 1963, continuing well into the 1980s (NHC 2005, 6).

Pumwani and surrounding areas were not exempted from these developments. Also here certain areas – some of which were illegal settlements – were slotted for demolition, and Pumwani as a whole, given its (still) temporary status, was (still) scheduled for redevelopment. Ever since 1927 when plague broke out in Pumwani, plans for total rehabilitations of the area surfaced at regular intervals. In 1941 Municipality of Nairobi (MNC) minutes noted the need to embark “as early as possible upon a scheme of housing of sufficient magnitude to meet the needs of the native population (in Pumwani)” (Bujra 1972, 18). In 1946 the Town Planning Engineer was instructed to prepare a new layout for a complete replanning of the area (Hake 1977, 132). The plans never materialised. In 1951 the MNC proposed a scheme where residents were to be given assistance in redeveloping Pumwani themselves (Bujra 1972, 18). In 1954 both government and City Council agreed that something needed to be done (Bujra 1972, 18). By this time the Emergency was in effect, validating the need for demolishing structures in Pumwani, albeit for security reasons. Thousands of inhabitants were removed from Pumwani in the period, but instead of commencing reconstruction of housing, the NCC embarked on several new housing schemes East of the location between 1955-1962 (Harris 2007). In part, redevelopment of Pumwani was made difficult by the political push towards a complete redevelopment rather than incremental upgrades to the existing housing. Redevelopment was brought to the fore in the Council both in 1961 and in 1962, this time together with the Pumwani Village Committee. When the Committee in 1959 asked for 500 pounds to be allocated the upkeep of roads in the location, the response from NCC was negative, with the reason that the money would be wasted given the imminence of the redevelopment of the entire area (Hake 1977, 133).

By 1963 a scheme had been prepared for spending 122 000 pounds in on new roads and sewers in Pumwani (Hake 1977, 133). But with the shift of power later the same year, the plans had yet to be carried through. The new City Council took action by appointing a special committee dedicated to the redevelopment task: the Pumwani Redevelopment Subcommittee was appointed at the first meeting of the new Social Services and Housing Committee (Hake 1977, 133). This was the first step towards the planning and construction of The Pumwani Urban Renewal Scheme Phase I, later dubbed California (or Calfonya as it came to be written locally). The scheme was carefully backed by two reports, both of them mapping and analysing conditions in Pumwani, but with different results.

In April 1964 the Chief Valuer of Nairobi City Council, E. T. Farnworth, presented A Survey of the Problems of Redeveloping Pumwani. Farnworth pointed out that Pumwani's location near the city centre made it too valuable to retain for housing only. He was of the opinion that the once powerful landlords of Pumwani were themselves of little economic value to the City Council, and that they had grossly overstepped their allowances in terms of

building footprints (Hake 1977, 134). Farnworth suggested a new plan and layout with a lower inhabitant density and that landlords and existing tenants be allocated housing on equal basis.

A year later the Pumwani Redevelopment Subcommittee had commissioned another report to “build on the findings in the Farnworth report” (Mbogua 1965, 1). The Mbogua report reversed some of Farnworth's recommendations: Mbogua found the landlords to be “politically vocal” groups that needed to be treated with diligence, as a scheme without their support “is likely to prove a failure” (Mbogua 1965, 11). The construction was carried through on the basis of Mbogua's recommendations. There were an estimated 9-10 000 residents in Pumwani in 1965. The area chosen as the site for the Calfonya scheme lay East of Pumwani. Landlords and tenants in the area of Pumwani directly West of Calfonya, today referred to as Bash, were to be the main recipients of the housing scheme. NCC started negotiations with landlords to buy up their current houses, in order for them to invest in housing in Calfonya. Once Bash had been emptied, a continuation of the housing scheme was to be initiated in Bash. Bash counted 104 houses, and was among the first areas where the original Majengo houses were constructed in the 1920s. 96 house-owner landlords and around 2 000 tenants were directly affected by the scheme. Over 75% of these residents were Muslims. Among the house-owner landlords, half lived in Pumwani, and of this half, 35% were women. 65% of all the affected house-owners were over 60 years (Bujra 1972, 85). Among the affected landlords were many prominent Muslims and businesspeople, and most all landlords and traders were members of either the Pumwani Landlord's Association (PLA) or the Pumwani Trader's Association (PTA):

The former claimed to have 200 members in 1970 (well over half the landlords of Pumwani) and had both of Pumwani wards (except Mashimoni) city councillors on its committee (just after independence - 60 %), whilst the latter claimed a membership of about 100. The chairman of the PLA was also the treasurer of the PTA, and both bodies were active in pushing their special claims with the authorities. (Bujra 1971, 32)

These organisations had considerable power within Pumwani, and were used as vehicles in negotiations with the NCC. They were partially heard (source, or elaborate). With only half of the effected landlords living in Pumwani the organisations partially failed to consolidate their claims (Bujra 1972, 86). There were disputes with the NCC in relation to the cost of the new housing in Calfonya, which for many was proving to be too expensive. The Calfonya scheme was finished in 1969, and although it represented a new standard of living with better houses, better infrastructure, more spacious and well-lit rooms, better airflow, and outside recreational spaces, the result was also that the dividing line between the propertied and non-propertied in Pumwani

was exacerbated. Only the more prosperous landlords and landladies could afford the transition, and ultimately gained economically from the shift due to increased income from rent. Landlords who struggled to meet the economic demands of the new scheme were ultimately forced to move out (Bujra 1972, 88). NCC were nonetheless successful in buying out all landlords from Bash, but the continuation of any housing scheme in the area was held off for decades, despite clear indications that construction was imminent. 14 houses in Bash were torn down in 1969, but the rest of the original Majengo housing stayed intact until the 2000s. The NCC, now the formal landlord of the remaining houses, allowed new tenants to move back in during the over three decade long temporary halt of construction efforts.

Although dilapidated and worn, Calfonya still provides upscale living in Pumwani. Not only for those who were born better off than the rest, but also for those who have worked their way to more money. Two respondents who today live in Calfonya are examples of this. One is a self-made business entrepreneur who, through his trade in Gikomba market (a large market adjacent to Pumwani) is able to pay rent four times higher than that of his previous rental in Pumwani (respondent AT 2012). The other is a clerk in a government office, a decently paid job, allowing him to move from 'old' Pumwani to a rental apartment in Calfonya (respondent GK 2012).

Calfonya is also the home of 'old money' and power. Two respondents are examples of this. One, a high-ranking union representative, with personal and professional ties to Tom Mboya, was allocated an apartment there by Mboya (respondent TU 2012). Another respondent was born in Calfonya, grew up and went to school there. With a university degree, this person holds an influential management position in one of the key NGOs working in Pumwani.

As landlords and landladies bought into the Calfonya scheme in the late 1960s, rooms were rented out to cover initial economic losses. None of the tenants in old Majengo were able to meet the rents in Calfonya. The redevelopment scheme thus became a housing estate for new tenants with little or no previous connections to Pumwani. The new houses and its new mix of residents never took on the original history of Pumwani. Calfonya was and still is outside of the social, cultural and historical boundaries of Pumwani, despite being located on 'old Pumwani' grounds. When Calfonya was built an attempt at a clear break from Pumwani was made. On the part of the landlords, landladies and tenants, Calfonya represented a move upwards in society. For the authorities the old colonial rhetoric of 'removing the eyesores' (that were unbecoming to a world class metropolis) was used to herald in a new era of social housing. The result was that house-owning elite

who could afford the shift prospered, while conditions remained much the same for most people in Pumwani.

But Calfonya was only a partial redevelopment of Pumwani. A subsequent development was constructed by the City Council South of Calfonya. Locally dubbed Biafra, it was intended to provide somewhat cheaper accommodation for those tenants displaced by the Calfonya scheme that could not afford Calfonya rents. But also here the rent proved to be too expensive for tenants. Some house-owners in Biafra originated from Pumwani, but many house-owners and tenants came from elsewhere in Nairobi.

Plans for any new redevelopments lay untouched until the early 1980s when a scheme for a social housing high-rise development started taking shape, this time on NCC property in Bash. The negotiations and buying out of original landlords from Bash in relation to the Calfonya scheme laid the grounds for a smoother process this time around: being the sole landlord in the area the NCC could easily initiate the next phase of the housing scheme in Pumwani.

As with Calfonya, this development phase also proved too expensive for most of the displaced house-owners and tenants. The construction of Highrise was slow, with only parts of the proposed scheme finished and inaugurated by 2005 (NHC 2005, 13). It now houses some original Pumwani residents, but few can afford the rents. An additional development exacerbating class divisions and alienating those that live in both Calfonya and Highrise from the rest of Pumwani is that house-owners in the redevelopment schemes were given title deeds to their apartments and flats. This has resulted in speculation over flats on the open market, where it is rumoured that Somali landlords are controlling much of the real estate in these areas.

Calfonya, Biafra, and the Highrise schemes were only partial redevelopments of Pumwani. Large parts of the historical centre of Pumwani still exists much as it has in the 90 years since its inauguration as a temporary settlement. Why is this? Three main reasons can be mentioned.

Firstly, inability to carry through any plans can partially be attributed to NCC constantly focusing on a complete redevelopment of the area. Interviews with respondents closely connected to the redevelopment schemes confirm that NCC simply could not afford to foot the bill for the task (COTU respondent 2012). A loss of tax revenues in the 1970s reduced the role of local government. NCC was only able to cover 10 % of its expenditures alone. The City Council was thus overly dependent on government allocation of funds, with the result that housing and planning was mostly transferred to National government (Department of Housing and Social Services). Additionally, with the close ties between national governments and international aid agencies,

social housing and planning is today infused by NGO actors as well as large multinationals such as UN HABITAT who wield a disproportionate amount of power over local planning affairs in Nairobi (Goux 2010; Muthala 2010). The large scale NGOs were and are more concerned with the dire needs in places like Mathare Valley (popular during the 1970s and 1980s) and Kibera (popular during the 1990s and 2000s). In other words, from a social housing perspective the needs of Pumwani were politically and economically weighed against the needs of other settlements in Nairobi.

Secondly, the redevelopments that have taken place have proved to miss the intended target groups of urban poor, and may well have resulted in concerns being voiced internally in the Municipality, questioning the sensibility of continuing the scheme at later dates.

Thirdly, a returning argument has been – and still is – that areas like Pumwani though sub-standard, are key housing areas in Nairobi. Demolition of such areas would have temporary but seriously negative effects. The argument for keeping a housing development status quo has been a supplementary argument made in Nairobi for decades. Recently, a similar argument has been made by Huchzermeyer in her review of current tenement developments in the North Eastern suburbs of Nairobi. She states that if the Nairobi City Council were to clamp down on such developments this would lead to “massive homelessness and the loss of urban qualities” (2011, 9).

Since independence the land Pumwani is located on has increased in value. Keeping the settlement in its current condition is therefore, economically speaking, increasingly unfavourable since its commercial potential is not by far being realised. At the same time it is economically sensible to utilise the area for housing, at no cost for the Municipality, for an increasing population now numbering upwards of 20 000. Thus, the question of redevelopment becomes a constant consideration for the city in terms of weighing the increase in land value against an increase in population - a population they will have to relocate if Pumwani is to be redeveloped.

The future reality for Pumwani was alluded to already in the early 1960s by E.T. Farnworth. It is too close to the city to be a housing estate only (Hake 1977, 134). The market will eventually demand that commercial activities to a larger degree be catered for. This is happening in a small scale today with shops cropping up inside and on the edges of Gikomba market. A very distinct possibility is that any new area plans for Pumwani will open up for a greater degree of permanent, commercial buildings and activities. If this happens, it will necessarily push out a large portion of the existing population: not only in terms of use of space, but also because of inadvertent increases in rents. In this future scenario tenants in Pumwani will be other

people than the ones that live there today, meaning that the Municipality not only has to address a commercially driven redevelopment of Pumwani, but also find new locations for most all of its current residents. The NCC's inability to provide adequate housing for people in Pumwani needs also to be seen in light of larger structural deficiencies in a Kenya where both residents and the international community lacked trust in state institutions in general and their ability to solve problems (Folke Fredriksen 2007, 73-95).

With such political and administrative inadequacies, residents in Pumwani have historically turned to internal, local structures for support. But even internal structures have had considerable support and influence from larger, national organisational networks. Political youth groups like KANU, who were champions of ‘old politics’, have had a strong standing in Pumwani, especially during the 1990s. Other political entities, such as the Central Organisation of Trade Unions (COTU) has been located in Solidarity House in Mashimoni since the 1950s.

A few NGOs have had a historically strong position in Pumwani. Undungu Society have worked in Pumwani for decades, involved with amongst others squatter's rights. Though they claim to work in Pumwani/Majengo, their main focal areas are the squatter settlements outside of Pumwani Ward: Kitui, Kanuku, and Kinyago (in Eastleigh Ward). These settlements have strong social and organisational links to Pumwani, and as a result, are often counted as a part of Pumwani. Numbers of inhabitants in Pumwani vary widely as a result, depending on where the borders are drawn. Undungu society is well connected. Earlier, Undungu was supported by Norwegian Church Aid, and: “its board included ‘big men’ like Reverend Samuel Kobia, the general-secretary of the National Council of Churches of Kenya, Effie Owuor, a judge at the Supreme Court, and Amos Wako, the general attorney” (Aid Watch 2009). Other organisations are the Riyadha Mosque Committee, also well established and connected to Members of Parliament. The many youth based CBOs in Pumwani are also part of a larger network. They can all trace their roots back to St John's Community Centre, a leading NGO with overseas affiliations. As an NGO, St John's has had a unique position in Pumwani. Its culturally conservative and moralising Christian approach has had a profound effect on developments in the communities – an approach that has been complementary to the approach of both the Muslim community and its charities, and the business community and its commercial interests.

Throughout its history, Pumwani has, despite many setbacks and deterioration of housing stock and standards of living, managed to maintain relative stability. There is a clear understanding among residents that people in Pumwani have helped each other out, and that strong historical bonds of kinship and friendship have been important in order to maintain Pumwani

as a community. Landlords, landladies and the business community are treated with reverence and respect, and have been instrumental to sustaining community building in Pumwani through their commercial activities. For such commercial activities to be successful there has been a clear need for social stability and controlled change in Pumwani. Despite the fact that Pumwani initially can be said to have built its urban fabric on multiplicity and difference, there has since been a constant internal drive towards stabilising the community. With the business and house-owning elite being strongly connected to Muslim, and later, Christian cultures, stability was interwoven with the conservative values of these cultures. This is an important part of Pumwani's history, one that its residents take pride in.

While the Muslim community charities were focussed on more traditional charitable work such as handouts, and only assisted Muslims, St John's altered their operation significantly since the beginning of the 1990s. Up until this point St John's and the next door Christian Industrial Training Centre were involved with training opportunities for both men and women, on a traditional trade and skills level: carpentry and masonry, 'home industry'<sup>11</sup>, secretarial trades, etc. In 1989 St John's conducted a baseline study (Onyango 1989), which was followed up by a participatory mapping of Pumwani in 2005 (Muiruri and Gatei et al. 2005). The conclusions convinced the organisation to alter its course to focus more on youth development and youth groups. To a large extent this has been successful in that a number of youth groups have started up throughout Pumwani, giving a voice and identity to many Pumwani youths. Many of these groups have in turn organised into CBOs, and started training youth on their own. The youth groups are today independent of St John's (respondent SSJ 2012; respondent PSJ 2012). The type of work carried out by the CBOs varies from toilet services to garbage removal, sports activities, and theatre. Almost all CBOs have some commercial interests that provide a certain degree of economic stability within the groups. The most cohesive feature within the CBO groups is however the culturally conservative Christian values engrained in their work and the training of new recruits: respect and tolerance as well as abstinence from drugs, alcohol, and sex before marriage are typical issues fundamental to these groups. In addition, many of the organisations are rights based groups, dealing with corruption and violations against residents. As such these young people have over the years come to possess relatively powerful positions in society, acting as sounding boards and negotiators between the local population and local government and police. While other youth in popular settlements in Nairobi adopted and honed typical global youth culture expressions like hip hop and street art, based on ideas of resistance

<sup>11</sup> The making of handicrafts to be sold in hotels (respondent SSJ 2012)

and anti-establishment sentiments, the youth groups in Pumwani organised around more conservative values and norms, inherited from St John's and the Muslim society, and became bona fide community players: productive units making respectable commercial and social contributions to Pumwani society, in keeping with the area's urban history and constant struggle for stability.

If we see the CBOs that have started up in Pumwani during the last two decades as products of St John's work, the total amount of NGOs and CBOs is quite limited in comparison to other popular settlements such as Kibera. It can be speculated that the long term, strong presence of St John's (and to a certain degree Undungu Society and the Muslim charities) has dissuaded other NGOs from starting up operations in Pumwani. In many ways St John's holds a NGO-monopoly in the area. Historically, the rise of St John's in Pumwani can be seen in relation to the loss of cultural hegemony on the part of the Muslim community. In part this may be due to the general growth in popularity of western ideals in Kenyan urban societies during the latter half of the 20th Century. But there are also other reasons: the redevelopment schemes cut deep into the social structure of Pumwani, especially the Muslim community. The Muslim community was partially disintegrated, with the new housing schemes being a fulcrum in breaking apart the once important socio-economic security net that the early Muslims in Pumwani had built up. The respite in Muslim dominance can be seen as having led to a social power 'vacuum' that value based Christian NGOs such as St John's (its Christian value-base resembling Muslim values) could utilise to gain dominance.

#### VISUAL ANALYSIS

Figures 7.3, 7.4, and 7.5 are visual mappings of historical urban developments in Nairobi that have had significant effect on Pumwani. The three maps are divided into three periods: up until 1929, 1930 to 1949, and 1950 to 1972. These maps are created for a twofold purpose to help both reader and researcher to better understand certain historical developments.

Firstly, they help the reader to better understand the spatial ramifications of a number of the developments that the above texts discuss. The placement

Figure 7.3 Historical map showing urban developments in and around Pumwani up until 1929. >

Figure 7.4 Historical map showing urban developments in and around Pumwani 1930 - 1949. >>

Figure 7.5 Historical map showing urban developments in and around Pumwani 1950 - 1972. >>>

Urban developments, Pumwani and surrounds until 1929

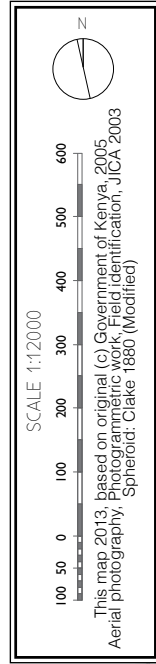
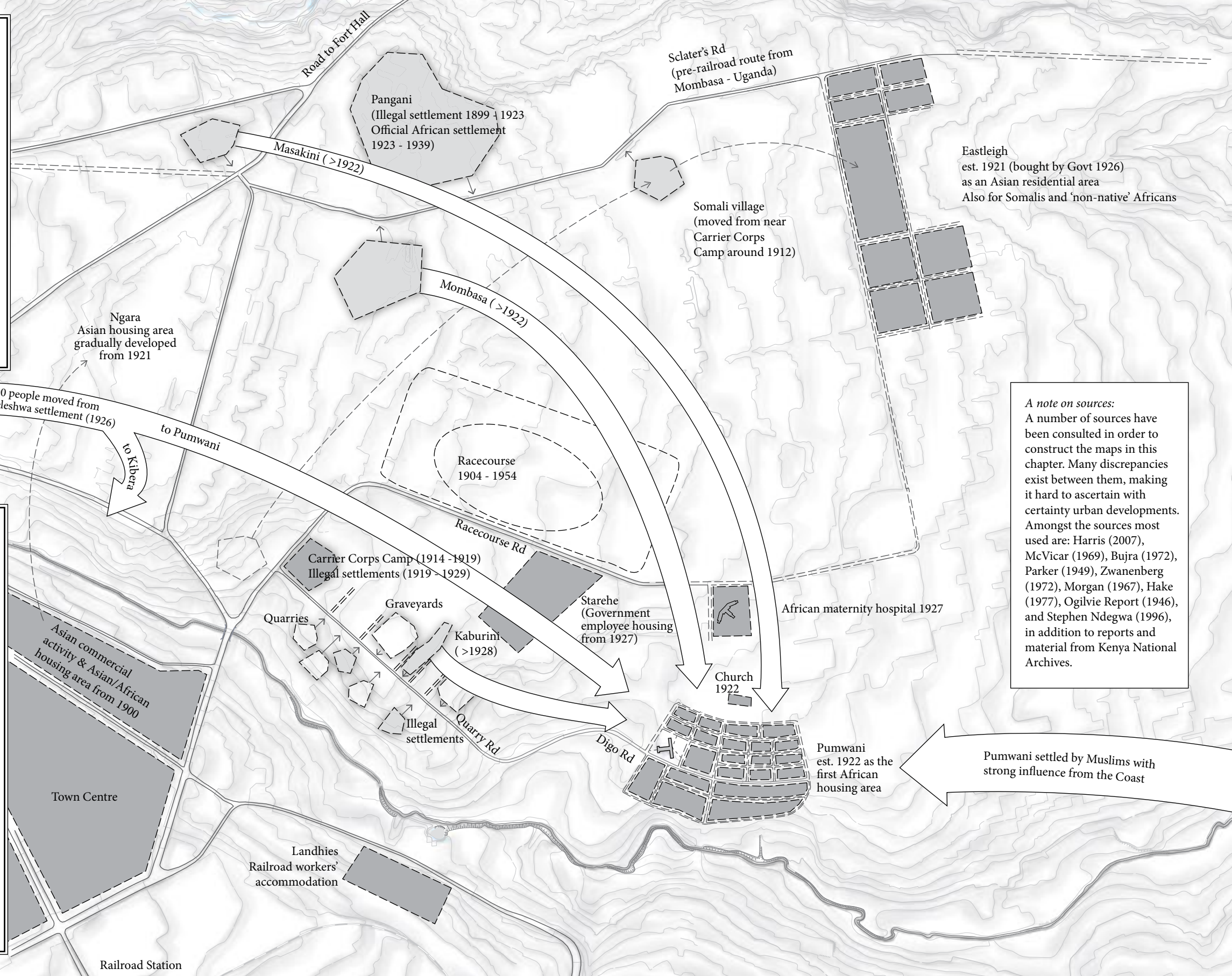


Figure 7.3

**KEY**

	Main road		River
	Secondary road/possibly built		Slope
	Footpath		Connectivity of settlement to road
	Bridge		Movement of people to Pumwani
	Planned/legal settlement		Movement of people indirectly influencing Pumwani
	Various services/activities		
	Illegal settlement		



*A note on sources:*  
 A number of sources have been consulted in order to construct the maps in this chapter. Many discrepancies exist between them, making it hard to ascertain with certainty urban developments. Amongst the sources most used are: Harris (2007), McVicar (1969), Bujra (1972), Parker (1949), Zwanenberg (1972), Morgan (1967), Hake (1977), Ogilvie Report (1946), and Stephen Ndegwa (1996), in addition to reports and material from Kenya National Archives.



Urban developments, Pumwani and surrounds 1930 - 1949

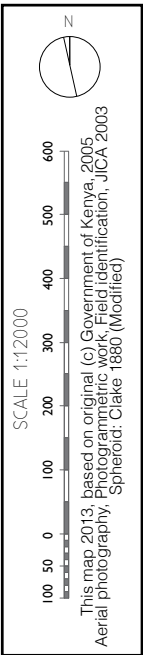


Figure 7.4

**KEY**

- Main road
- Secondary road/possibly built
- Footpath
- Bridge
- River
- Slope
- Connectivity of settlement to road
- Movement of people to Pumwani
- Planned/legal settlement
- Various services/activities
- Illegal settlement
- Movement of people indirectly influencing Pumwani

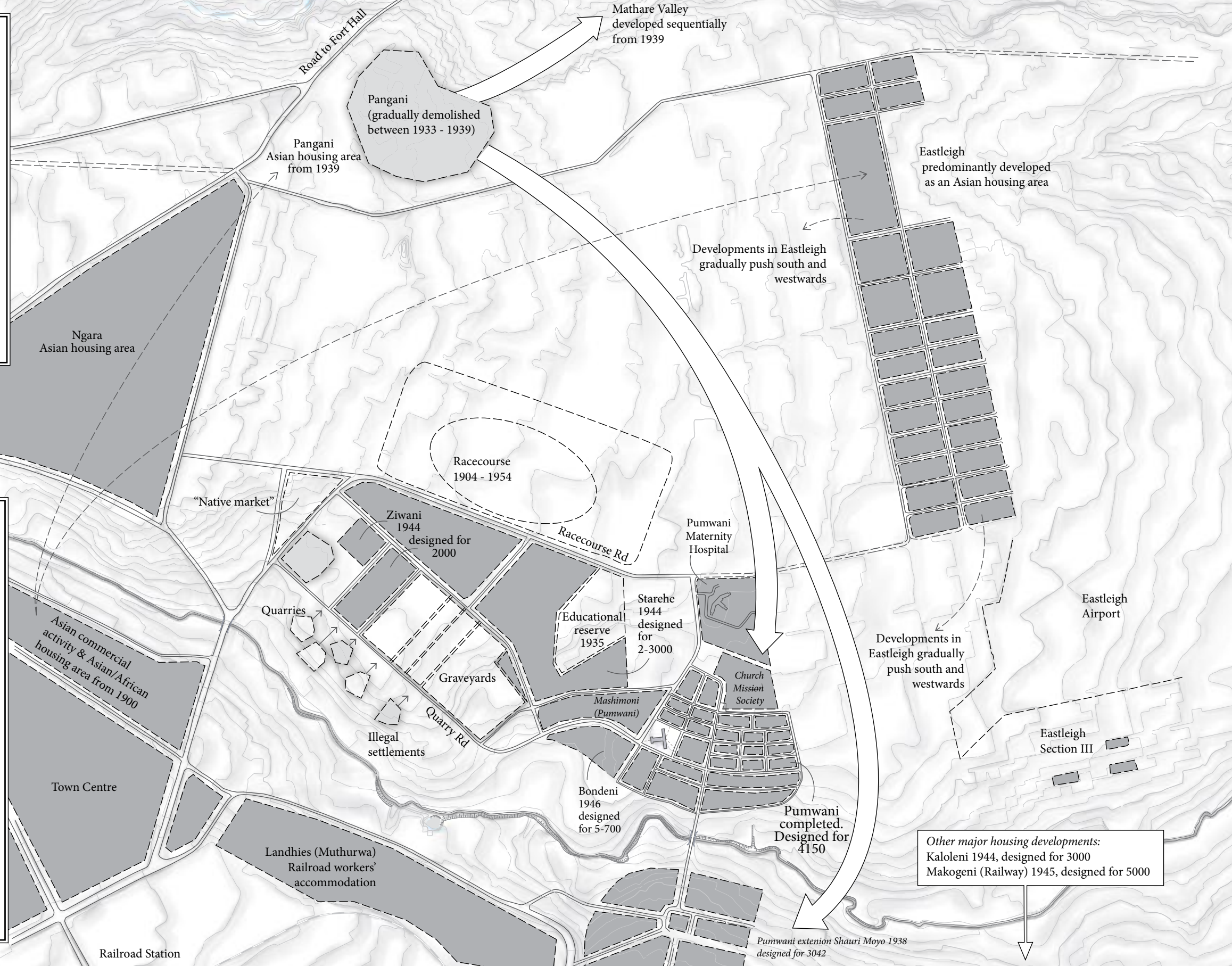


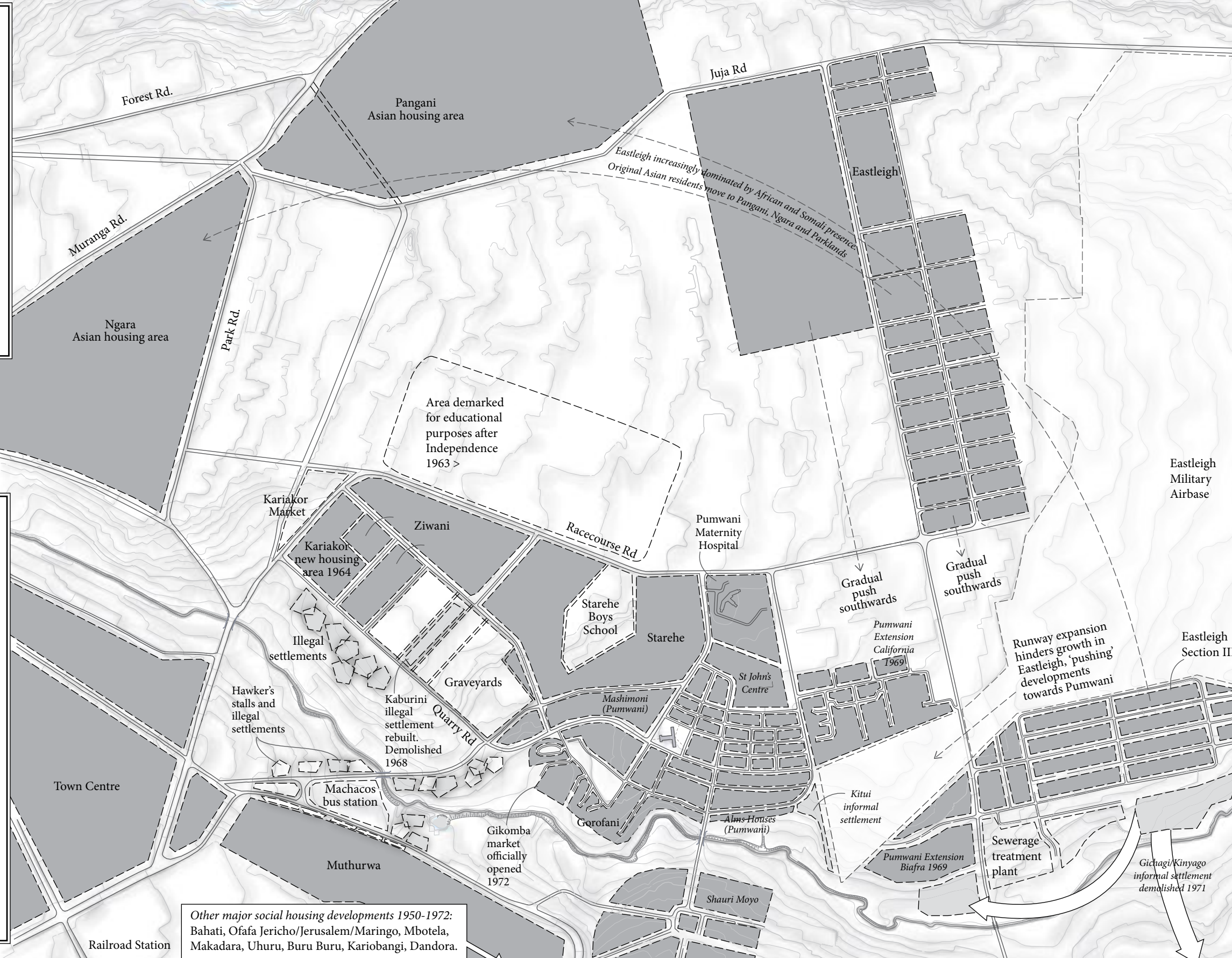
Figure 7.5

SCALE 1:12000

This map 2013, based on original (c) Government of Kenya, 2005  
Aerial photography, Spheroid: Clarke 1880 (Modified)

KEY

- Main road
- Secondary road/possibly built
- Footpath
- Bridge
- River
- Slope
- Connectivity of settlement to road
- Movement of people to Pumwani
- Planned/legal settlement
- Various services/activities
- Illegal settlement
- Movement of people indirectly influencing Pumwani



Other major social housing developments 1950-1972:  
Bahati, Ofafa Jericho/Jerusalem/Maringo, Mbotela,  
Makadara, Uhuru, Buru Buru, Kariobangi, Dandora.

of initial African settlements become clear, the growth of the formal city is seen in stages, and the initial settlements' transitions into legal developments are visualised. The maps also serve an important basic function common to most maps: urban developments are geographically placed in relation to one another, they are given physical proportions, and allow for comparisons across space and time.

Secondly, the maps help the researcher in further developing the arguments made in the texts above. As such the maps function as an extension to the text. The need for early settlements to develop alongside travel routes, the impetus of the 'city proper' to push African urban developments north and eastwards along Nairobi River, how developments in other parts of the city can be shown as indirectly having consequences for Pumwani, and the resulting pressure on Pumwani by middle class developments in Eastleigh as well as by the military airbase.

This twofold purpose of the maps points back to Wood's *intrasignificant* and *extrasignificant* codes (1991) as discussed in Chapter One. What do the maps mean to the mapper, and what do they mean to the reader? The maps may function on their own, depicting geographic and spatial qualities that are difficult to convey textually. But they cannot be divorced from the texts in the chapter. They are vehicles for visualising some of the selected arguments made regarding the developments that have come to shape Pumwani.

For architects and planners seeking to use historical analysis as part of their mapping of popular settlements, the visualisation of historical developments can be a key tool for better understanding how and why various parameters have come to shape the community they work in.

## CONCLUSIONS

The historical analysis of Pumwani lays bare a number of issues that today are defining for the area, and become the grounds for further analysis. What follows is a method of analysis that is a synthesis of mapping methods presented earlier in this thesis (where Bujra (1973) and Moser (2009) are key authors). Through Moser's contribution this in part builds on the SLA framework. One of the key activities of mapping using the SLA framework is the identification of groups with which to conduct interviews and with which to carry out mapping activities. Although the SLA frameworks as e.g. presented by DFID have guidelines for how to conduct interviews, there are no guidelines for how to identify groups. The historical analysis that has been presented here will be helpful in identifying possible groups that any further analysis will build on.

Identifying different groups with which to conduct mappings should be an important part of the SLA process. What types of groups are identified, and what answers they provide are crucial to what kind of information is collected – and to what kind of conflicts are made visible. For instance, interview groups focusing on young and old people in Pumwani may highlight conflicts between generations and influence perceptions of e.g. culture and respect, such as: “we're not allowed to partake. The Mzees decide on everything” (Respondent KI 2012), or: “(the younger generation) don't follow the values of the landladies or parents. So that makes them lower their dignity and respect and all those values” (Respondent EWT 2012). Interview groups focusing on women and men may highlight gender-based conflicts and provide an all-encompassing lens through which to view e.g. religious cultures and affiliations. Interview groups divided between Kikuyu and Akamba respondents may over-highlight ethnical issues, and create a very determined view of issues connected to e.g. trade and commerce. In other words, it may be problematic to try to learn about issues in a settlement through interviews without any prior knowledge of some of the main problematics in the area. The preceding historical analysis of Pumwani gives us a solid foundation from which to attempt to identify groups that are important to consider when discussing possible interventions in Pumwani. And maybe more importantly: the preceding historical analysis allows us to make connections between groups and historical events or issues that will have bearing on any attempts at interventions or redevelopments in the area.

### Groups of historical importance in Pumwani

A number of groups with historical relevance in Pumwani can be attempted listed as an early suggestion to which groups are to be interviewed in further mapping exercises. These groups are tentative because they relate more to historical tendencies than to current trends (and may not even exist today). The following list is not nuanced, given that some groups probably overlap (e.g. tenants most likely also relate to other groups), and some groups are too large to be of operational use (e.g. landlords and landladies which are comprised of different interest groups).

The following 13 distinctive groups can nonetheless be derived from the preceding historical analysis:

#### *Muslims and coastal Swahili people*

The Swahili culture that even today is highly present in Pumwani, is evidence of a strong historical connection to the coast that certain groups in Pumwani are more intrinsically connected to than others.

*Muslim businessmen, traders, and entrepreneurs*

An early group in Pumwani that were important in forming the location, and were a de facto ruling class. Despite their power and influence having waned since before independence, their presence is still felt in Pumwani.

*Other businessmen, traders or entrepreneurs*

There are also businessmen, traders and entrepreneurs in Pumwani that are not connected to the historical Muslim community in Pumwani. This group is diverse, and needs to be further distinguished. This group could include anyone from small-scale traders in Gikomba Market, to big Somali businessmen speculating in the housing market on the fringes of Pumwani.

*Landlords and landladies*

Often connected to the Muslim businessmen group, but not entirely. Landlords and landladies have a unique position in Pumwani, not only in that they are quite many and as a group are a political force in Pumwani, but also in that they in general have not been able to amass housing and partake in property speculation. They are therefore of less stature individually.

*Tenants*

The largest and least cohesive group. Unless you belong to a house owner family (i.e. landlord or landlady), you are a tenant.

*Christian educated 'elite'*

Borne out of missionary endeavours this group had become a powerful force in Kenya by the 1950s. With their western education and world outlook they represented a counterweight to the original coastal Swahili groups, and over time became more influential.

*Labour groups/unions*

In general important to the rise of political consciousness throughout Nairobi, labour groups and unions would hold rallies amongst others at the Kamakunji Grounds between Pumwani and Shauri Moyo from the 1930s onwards. These groups became even more connected to Pumwani through the establishment of labour headquarters in Gikomba.

*Youth groups*

Becoming active and organised from the late 1980's onwards, these groups are important to community development (and/or their own group's developments) today.

*Jua Kali workers/casual labour*

Also a large and unrefined group. A large group of tenants in Pumwani work with either casual labour in and around Pumwani, or are skilled in a craft such as carpentry metalwork, and find small-scale employment in or around Pumwani. Common to these people is the lack of longevity and prosperity of their jobs, as well as their lack of political and social power.

*Prostitutes*

Historically a well established group in Pumwani. Many of the original prostitutes were also landladies, and had some political power in earlier decades. Many of their decedents still live in Pumwani, as the house has been handed down from generation to generation - often from mother to daughter.

*NGOs*

Missionary outreaches were established in Pumwani as early as the 1920's, while Muslim based organisations also extended a charitable outreach from early on. St John's is today the main NGO actor in Pumwani with decades of historical connections to the community.

*Nairobi City Council*

As the major landowner in Pumwani, the NCC hold a lot of power and influence in the area. Having expropriated a number of allottees unable to maintain the allotment letter agreement with the City Council, the NCC have also become a major landlord in Pumwani (or do they sell the allotment to speculants?)

*Chief and D.O.*

The Chief and District Officer, as appointed by the NCC hold a powerful position as a mediating force between the City and the people of Pumwani. Their role has become increasingly significant over the last decades, with the Chief's Council consisting of elders belonging to the semi-educated or

skilled segment of the population - often with long careers in government related administration behind them. Although the positions are representative of social and political power, they are not representative of economic power. Little or no monetary affluence can be gained from these positions, although allegations of corruptions are rife.

### **Issues of historical importance in Pumwani**

A number of historical events have been influential in defining what Pumwani is today. Many of the tendencies particular to Pumwani can be traced to historical events, and are somewhat overlapping. Based on the previous historical analysis it is possible to list a few of these:

#### *Allotment letters and stability*

The provision of allotment letters is a marked feature in Pumwani's real estate market. Whatever the initial reasons for introducing the allotment letter system to Pumwani, it has provided for a number of unintended positive consequences: the prohibition on selling or purchasing property keeps Pumwani from appearing on the open market, where property speculation would most certainly have lead to larger richer landlords. Also, the inability to sell property maintains long standing relations between landlords, landladies and their tenants, and as few landlords or landladies own more than one structure, there is a monetary limit to the difference between landlords and landladies as a group on the one hand, and tenants as a group on the other. The picture is however complicated by some landlords and landladies belonging to the group of business men, which increasingly sets them apart from their tenants.

#### *Uncertainty of housing stock*

The prohibition on building with permanent materials - although a hindrance in building salubrious housing in Pumwani - has a few unintended positive effects: it keeps rents low, allowing the urban poor to remain close to the city centre, and it keeps the population stable, as no large scale multi-story tenements can be erected (which is the case further up the road in Mathare, where the slum is starting to verticalise, leading to tenants living under increasingly abhorrent conditions in multiple stories, at great profit for the landlords (see Huchzermeyer 2011)). The negative consequences of the uncertainty of the housing stock are, similarly to other popular settlements in cities in the South, residents in Pumwani are unable to foresee a stable future in Pumwani, and house-owners are unable or unwilling to plan ahead and invest in property that may one day be demolished without substantial compensation.

#### *Commercial interests and stability*

The business community in Pumwani have been historically strong. They have had most to benefit in a stable society. Nairobi has, however, not always been stable, where increasing class differences, racial divisions, and land grabbing have resulted in tumultuous years and volatile situations that have been increasingly hard for the African urban population. Keeping a sense of stability and maintaining order (amongst others through close relations to the NCC both before and after independence) has therefore been paramount to successful entrepreneurship in Pumwani. Interest organisations such as the landlords association have been one way of achieving this.

#### *Internally managed social and physical structures*

The early Muslim settlers in Pumwani are documented to have provided "entry into urban social life, and access to the generosity of the Muslim community" for (convert) newcomers to the settlement in the 1920s (White 1991, 64). This marked the start of a community that to some extent was able to protect their own, and fend for their interests. The social structures that provide for those in need have been carried through until today, represented by both Muslim and Christian charities. St John's has notably been influential in this respect, helping in later years to build social networks of youths that are independent of charitable handouts, and are in turn able to create their own networks of self-help. The sense of autonomy in Pumwani is perhaps heightened by the allowance given to house owners to extend their structures, and make use of their allocated plots to the fullest. All residential physical structures in Pumwani are self built, but with an architectural identity (or typology) and visible systematic appearance that sets them apart from other self-built structures in other parts of Nairobi.

#### *Cultural conservative values/conservation of status quo*

Many of the business related interest groups spring out of religious affiliations to either Christian or Muslim faiths. Common to these are a cultural conservatism that has been in tune with ideas of keeping stability and a sense of control in Pumwani. This cultural conservatism has also been important in preserving the strong sense of history and feeling of ujamaa that resonates profoundly with long standing Pumwani residents.

#### *Social cohesion and ujamaa*

The early Swahili influence in Pumwani, coupled together with interests and laws that dictated stability have in turn lead to a development of a relatively

stable populous that in turn helped generate long standing personal and family bonds, networks that have helped build social cohesion and ujamaa, a feeling of togetherness.

#### *Identity building*

Almost contrary to the social cohesion and ujamaa is the early multiplicity of Pumwani. But rather than being a factor that separated residents, it increased their unity thorough development of a unique African urban identity - perhaps only made possible by the presence of manifold groups and interests in an urban melting pot - held together by externally defined compartmental structures such as segregation, pass laws, lack of infrastructural provisions, lack of social security, and so on. The lack of external provisions can in part be attributed to why internal provisions were given by the multiple and diverse groups that gathered in Pumwani.

#### **Connections between issues and groups**

Initially, developments related to *allotment letters and stability* and *uncertainty of housing stock* are connected mainly to five groups: Landlords and landladies, businessmen - Muslim and others (a group often coinciding with landlords or landladies), and the NCC (the issuer of allotment letters). In addition the allotment letter system, and uncertainty of the housing stock favourably affects tenants in providing low rents, and unfavourably in that lack of security of tenure often results in substandard housing and lack of upkeep. An additional group involved in relation to housing is the Chief and the D.O. as they are local overseers of housing, extensions, and disputes concerning housing or rents.

*Commercial interests and stability* are developments that can be ascribed mainly to four groups; businessmen, entrepreneurs, and traders, including Muslims; landlords and landladies; the NCC; and later, Christian educated 'elites'. By extension the Chief and the D.O. are also involved in maintaining such developments.

*Internally managed social and physical structures* are historically connected to Muslim and Swahili coastal groups. Later Christian elites and NGOs were involved in such developments. The charity work mainly targeted tenants, Jua Kali Workers, and prostitutes, and later on, youth groups.

*Cultural conservative values* were born out of Muslim and Swahili Coastal traditions, as well as Christian elite values, but can also be connected to landlords and landladies, as well as businessmen, entrepreneurs and traders

including Muslims. In more recent times conservative values have been advocated through NGOs like St John's Community Centre. Conservative values derived from Swahili Coastal Culture became important to defining Pumwani as a community. Such values were adopted by Pumwani residents as a part of defining residents' identities and establishing common ground between residents. More recently the advocacy of cultural conservative values have been specifically aimed at youth groups, who in turn promote such values to other, unorganised youth in the community.

Connections can be made between developments leading to both *social cohesion and ujamaa* as well as *identity building* to groups such as: Muslims and Swahili coastal groups, businessmen, traders and entrepreneurs, including Muslims, landlords and landladies, tenants, labour organisations, youth groups and the Christian elite. This is by far the largest set of connections.

These connections are not categorical, but are indicative of classic relationships between groups. Groups with invested capital and political interests have more power and influence over events and developments, and indirectly or directly over other groups with less influence. Also, power groups may be in opposition to one another, jostling for 'control' in the settlement (e.g. the Muslim elites and the Christian elites), but their joint efforts in pushing for similar developments are indicative of shared interests (e.g. such as striving for social stability to ensure a better environment for trade and commerce).

#### **From history to present**

The historical analysis of Pumwani provided in this chapter is in itself an academic contribution to research on African urbanity. The main motivation for writing this history is however to provide a number of distinct historical categories from which present day Pumwani can be sought understood and mapped. It is thus natural to start the following chapter, *Mapping Pumwani today*, by trying to view current conditions in the settlement through the lens of this chapter's historical material.

## 8. Mapping Pumwani today

### THE PROCESS

The previous historical analysis – and its focus on connections between various social groups and historical issues in Pumwani – is the backbone for mapping and analysing current events in this chapter.

Although this chapter can be read as an analysis of Pumwani, it is first and foremost a review of method: how and why have I gone about mapping Pumwani in the way I have done? As such the data presented; the social groups and issues brought to the fore are not the result of an exhaustive analysis of conditions in Pumwani - they are rather examples used to discuss the usefulness of this particular mapping method.

The structuring mapping elements from the previous chapter are *social groups* and *issues*. I have identified thirteen social groups and seven issues of major historical importance. In this chapter I aim to bring these groups and issues ‘up to date’. By doing so, a number of groups and issues may have changed or disappeared, and others may need to be added. An important question in this chapter is therefore how to methodically manage the ‘update’ of these historical groups and issues, and to identify alterations.

The process of mapping was iterative, and based to a large degree on multiple interviews with respondents. By moving back and forth between respondent groups, discussing issues with respondents, analysing and comparing interviews, and finally readdressing respondents, information was incrementally gathered to form a complete mapping of issues and groups important in Pumwani today.

### **Identifying initial respondent groups**

I started the mapping of current events by identifying 10 initial respondents, each representing different social groups, or a combination of different social groups and institutions, based on the previous 13 social groups and institutions identified in the historical analysis. These were:

- Elderly man (representing the Muslim community, and tenants)
- Elderly woman (representing a woman's perspective, and tenants)
- Jua kali worker (skilled labourers)
- Small-scale entrepreneur (representing small scale businesses and tenants)
- Educated youth (representing youth groups (CBOs), aspiring middle class, and tenants)
- Entrepreneur/trader (representing successful business ownerships and tenants)
- Businessman landlord (representing successful business ownership and house ownership as a business)
- NGO representative
- CBO representative
- Chief's Council Elder

Interview guides were created for the different social groups. Questions centred around some of the fundamental issues brought to the fore in the historical analysis, such as - but not limited to; issues of belonging, identity, and place - what being from Pumwani means, and if respondents consider Pumwani to be special in any way compared to other popular settlements; questions relating to class, ethnicity, and colonial history - what respondents know of the area's history, and what kind of differences there are between people in Pumwani; questions about the Swahili influence; questions relating to NGOs and CBOs - what kind of relationship the respondents have to organisations; questions regarding the redevelopment schemes; questions relating to work and income - to trade and spaces for trade; questions pertaining to home ownership and construction - about landlord-tenant relationships, about the position of women home owners, about construction practices and the law; and questions about the respondents' relationship to the authorities.

In addition questions relating to SLA-based topics were used to further elucidate the above issues. The SLA-based topics are further described in chapter five, and are: mapping *aspirations* within the different groups, achievable or unrealistic, in an attempt to understand the aims or ambitions of respondents; mapping the *problems and issues* that groups see as challenging, and what might hinder them from achieving their aspirations; mapping *assets*, as in the various social, physical, cultural, economic and political connections, relations, and networks that the group in question can draw on in order to mitigate or solve problems that arise; mapping *conditions*,

which investigates the current state of physical and spatial surroundings such as respondent's houses, streets, the condition of the neighbourhood and Pumwani; and *imagining interventions*, where the respondent is allowed to ruminate over what kinds of interventions could be imagined for their neighbourhood, and speculate about the consequences.

All interviews were open-ended, and semi-structured. Examples of interview guides can be found in Appendix C and D.

### **An incremental process**

The process as it progressed was not a straightforward one. Through the interviews with the initial respondents a series of tentative results were produced. These in turn would often lead to additional questions and/or additional interviews with new respondents representing additional social groups. New interviews would sometime lead to revisions of initial results.

As an example, in the initial interviews respondents were asked about their views on possible future real estate speculation and possible redevelopment schemes in Pumwani. The conclusion seemed to be that although these issues were seen as threats to the community, many did not regard these threats as serious because these threats have been consistent for decades without much happening. Such conclusions would have been in keeping with historical evidence. However, as new respondent groups emerged and new interviews were conducted, another story emerged – not by asking directly about the perceived threats of investors or redevelopment schemes – but through discussions of ownership. Tenant respondents that could afford it, had invested in plots on the outskirts of Nairobi. When asked why, respondents answered that they did not feel there was enough security in renting rooms in Pumwani. They reasoned that the threat of eviction from Pumwani was imminent due to increasingly aggressive would be investors and possible redevelopment plans on the part of the City Council.

This example shows how important it is to discuss and map issues with respondents from a variety of vantage points. Asking respondents about their views on issues that have been of historical importance in Pumwani and combining this with interviews structured around SLA-based topics proved fruitful because it allowed for related issues to be broached in different ways. Slight differences in asking questions by the interviewer, and slight differences in iterations by respondents would sometimes add new, important insight.

The mapping was thus produced incrementally, where processes of interviewing, analysis, and desk studies were carried out in parallel – with



one process informing the other and vice versa. Such a non-linear approach was necessary in order to move from an analysis of historical Pumwani to an analysis of today's Pumwani.

### Conveying findings

Based on a range of mapping approaches: interviews, desk studies, physical mapping, revisiting historical material, it was possible to achieve the following:

- A thorough mapping of key spatial, social, and economic issues in Pumwani combining text, images, maps, and diagrams in analysis.
- A brief examination of key factors influencing the divisions between current social groups.
- A description of current social groups, connecting these groups to key issues.

These three headings provide the structure of this chapter starting with key factors influencing social divisions, moving on to descriptions of social groups, before mapping key issues in the settlement. As all of these issues were methodically examined in parallel, their order of presentation in this chapter does not reflect the incremental fashion that the research followed. Rather, they are presented as complete narratives such as they unfolded after final analysis, ending in a thorough investigation of the possibilities of visualising key issues through the combination of text and image.

The visualisation is divided between two distinct levels of interpretation. On one level are the descriptive narratives of findings: here I focus on conveying the content of interviews with respondents, describing my own observations, and providing an analysis. These descriptive narratives can be read as one consistent piece of writing, providing a coherent story about a variety of situations in Pumwani.

On another level I provide a mapping-based analysis of the descriptive narratives. These analytical pieces intersperse the descriptive narratives at chosen points in the text. The analysis blends text with diagrams and maps, reviewing and explaining what the interview findings, observations and analysis would mean for *mapping* by bringing in a range of references, historical material, and visual tools. The ultimate aim of these analytical visualisations is to make clear the inextricable link between the spatial developments of a community and social, economic, political and cultural issues brought forth through interviews and historical research.

The visualisation as a whole thus seeks to map out the interconnectedness between the multiple layers of physical and non-physical by attempting to make all layers visible.

### UNCOVERING CURRENT SOCIAL GROUPS

#### Influential factors

In order to identify current social groups in Pumwani the following question was asked: based on the results of interviews with tentative respondent groups, what factors can be said to be influential to divisions between social groups?

Through the analysis of historical research and interviews a total of 12 factors were found. These are: a) landownership, b) structure ownership, c) being a landlord or landlady, d) monetary wealth, e) administrative or political commitments, f) Longevity of family connection to Pumwani (historical solidarity), g) business/enterprise ownership, h) being an employer, i) being a tenant, j) higher education, k) vocation trade, and l) unlicensed trade/casual labour. The list is probably not exhaustive, but does provide a thorough platform for identifying current social group.

The point of identifying these factors – and ultimately social groups – is to make clear that Pumwani is multi-faceted society. In addition, by identifying social groups we are able to better understand their relationship to key issues in Pumwani, as well as their effects on spatial practices in the community. There are for instance specific spatial practises associated with being a landlady or a landlord, such as the building of extensions. There are also spatial practices associated with for instance unlicensed trade as many of these activities take place in the street.

A number of important discussions are touched upon when identifying factors that influence divisions between social groups. One of these discussions relate to diversity - especially along lines of inequality, power relations, and divisions between social groups. Ogot and Ochieng' repeatedly point out in their revision of Kenya's postcolonial history how Kenya is steeped in class difference, and how Kenya's "decision to follow the capitalist, less egalitarian path to development (...) lead inevitably to the continuation of a social structure based upon wealth which was characterised by large gaps between the rich and the poor" (1995, 132). This is not only made evident by geographic divisions between East and West in Nairobi, but is also true within the settlements in the East.

With the turn in the 1980s and 1990s towards more internationally governed development strategies (as well as academic work) (Riddell 2007), the detailed focus on social stratification and relationships occurring *within* Nairobi's many popular settlements seems to have vanished in favour of

broader geographic research scopes informing (or being informed by) a broader approach to development. Social differences were present in research on Nairobi, but only to the extent where they could be observed between Nairobi's different constituencies (see e.g. Nevanlinna's discussions of income differences and differences in housing quality in Nairobi West and Nairobi East/South (1996)).

There are of course commendable exceptions, such as Luise White's study on prostitution in Pumwani and Pangani (1990), and Tom Anyamba's study of the diverse forms of informal architecture and its relation to income and social standing (2006). But for the most part discussions of social differences were not brought down to a neighbourhood or community level, meaning that inhabitants in popular settlements were generally considered to be poor and powerless, while residents in the western and northern suburbs of Nairobi were by and large considered wealthy and powerful. In other words, the story of social differences in Nairobi became a story where there were large and glaring differences within the city as a whole, but was also a story of a city where the neighbourhoods or wards were completely homogenous in terms of social standing. Judging from the previous historical analysis and interviews conducted in Pumwani, this is far from true. Pumwani is a highly differentiated community in terms of social attributes, variables, and relationships.

Janet Bujra's work on the effects of the redevelopment schemes on social relations in Pumwani (1972) can be construed as an investigation of factors influencing social relations and divisions in Pumwani. Although the work was done four decades ago and deals specifically with class and property, it does explain clearly some of the most important root causes to socio-economic conditions still evident in Pumwani today. For instance, she is able to connect the Muslim petty bourgeoisie to their elite status, not by virtue of some vague historical Swahili connection as some researchers would have it (e.g. McVicar (1969) or White (1990)), but rather by virtue of their standing as homeowners, landlords, traders, businesspeople and administrative headmen, bringing knowledge and explanation to a subject important to the inner workings of Pumwani.

The following analysis takes its queue from Bujra's work, while accepting that in the four decades that have passed, a more nuanced description of social attributes, variables, and relationships is necessary. While the neo-Marxist class analysis carried out by Bujra points to the important division between the propertied and the non-propertied classes in Pumwani, I would argue that her strict adherence to the analytical framework does not allow for an explanation of the nuances of classes and social relationships that can be found in Pumwani. The 12 factors presented here do not constitute a hierarchical list; the factors should rather be seen as relational. Many questions are asked for each factor. I do this in order to operationalize the factors as tools for identifying social groups:

#### *Landownership*

Does the person own land? Most likely this will be land outside of Pumwani, given the restrictions on owning land in the area (although it should be noted that the NCC is a major landowner in Pumwani). Owning land outside of Pumwani is indicative of the person/family having moved out from Pumwani, of having business relations or political affiliations outside of Pumwani, and of having capital that exceeds what most people in Pumwani have. There are a few large-scale landowners that are in Pumwani or come from Pumwani. These can be said to belong to an elite. But landownership is not necessarily a clear cut category: an element that complicates the issue is that many 'ordinary' families will, despite their long-standing connection to Pumwani, still retain small plots of land upcountry in the area the family originates from. These farmable plots are commonly seen as a failsafe and a retirement asset. Sizes – and economic gain from these plots – vary greatly.

Also, Pumwani tenants that can afford it have bought up small plots in the outskirts of Nairobi where they plan to build new homes for themselves and their families should their homes in Pumwani disappear. Most of these plot owners will spend years of incremental construction in order to finance such operations.

#### *House/structure ownership*

Does the person own a house or a structure? House ownership needs to be distinguished from two other connected issues: ownership of land, and being a landlord or landlady. Most people who own houses or structures in Pumwani do not own the land on which the house stands. They lease this from the NCC, paying a rent as a part of their agreement. Most house owners are also landlords or landladies in the sense that they rent out rooms in their house(s) to tenants. Some house owners do not however rent out rooms. Either the whole family lives in the house alone, or parts of the house is set aside for business activities (such as a bar, a workshop, a duka). Most house owners in Pumwani will own one house w adjoining structures. Very few house owners own several buildings.

#### *Being a landlord or landlady*

Most house owners in Pumwani are landlords or landladies. However, due to the illegality of selling and buying property in Pumwani, some landlords and landladies hold this position not by choice, but by inheritance. It is therefore useful to distinguish between landlords and landladies with political and/or business connections and aspirations, who see their position as landlords or landladies as important to their status, and landlords and landladies that

sublet rooms in their house to tenants as a means of earning an income. To compound matters, tenants are also ‘inherited’ through long standing landlord-tenant relationships common to Pumwani. Again, these landlord-tenant relationships can often be connected with kinship or friendship. Thus, the inheriting landlord or landlady may not have much choice in maintaining the status quo.

#### *Monetary wealth*

How much capital does the person possess? The issue of capital is intrinsically linked with property ownership, land ownership, and monetary value of any business enterprise. Still, some may have savings that are not tied up in the former – and is therefore not eligible under any of those categories.

#### *Administrative or political commitments*

Does the person hold a politically or administratively important position/tenure? This is not necessarily paid work, but connects the person to powerful administrative and political figures and structures – and provides the person with power and respect in local terms. The standing of the administrative/political position is however dependent on the type of organisation in which the person is given the tenure. Of note are the Riyadhha Mosque Committee and the Chief’s Elders Council. In other well-respected organisations such as St John’s, senior positions are manned by people living outside of Pumwani, but that were born and raised there. Elders are treated with respect in Pumwani, but age does not constitute an automatic rise in stature. A lot of young people hold positions in self-help groups and are trained as paralegals etc. This does not necessarily give them predominantly higher standing in the community, but enables them to communicate and cooperate with other people in powerful positions in society.

#### *Longevity of family connection to Pumwani (historical solidarity)*

How long has a family stayed in Pumwani? The duration of people’s connection to Pumwani has direct influence on their perceived social standing. It also directly influences monetary issues: people who have lived long in Pumwani pay less rent than newcomers. This ‘historical solidarity’ has partially contributed to the sense of cohesion in Pumwani. Interview respondents all indicate that there is a high degree of geographic mobility among people and families. This means that individuals may move away from Pumwani for an extended period (even decades), and come back and still be considered a Pumwani person. Children of people that have lived in

Pumwani, but that have never lived there themselves can also be considered Pumwani persons if they decide to move to the area – and will possibly be able to draw on the relations and connections that his or her parents made use of.

#### *Business/Enterprise ownership*

Does the person have a business or an enterprise? What is the amount of capital investment in this business/enterprise? What is the person’s income generated as a result of this investment? Many people in Pumwani run some sort of business or enterprise in order to support themselves and their families. The range and size of such enterprises vary greatly and can often be connected to some of the other categories (ownership, monetary wealth, being an employer). Although many of the businesses can be seen to be a part of the informal sector, the formal-informal dichotomy has little bearing on conditions in Pumwani. A more important distinction is between legal-illegal. Most of the businesses and enterprises in Pumwani seem to be run on a license. Those that are not are often connected to illicit activities (prostitution, unlicensed brewing, etc.).

#### *Being an employer*

Does the person employ people? Unskilled labour in Pumwani is both cheap and easy to come by. Very many business owners, small as well as large-scale, will have unskilled labour that they rely on from time to time. Such labour can be contracted informally, and will be paid by the day. Most small scale business owners and employers will have varying need for labour, and will be able to call it in (or call it off) on short notice. The employer has most to gain from this flexibility.

#### *Being a tenant*

In essence there are only two ways to reside in Pumwani – as a landlord or landlady, or as a tenant. Most people in Pumwani are tenants. The internal market in Pumwani seems to set the tone as to what rent is. Standard of housing and longevity of tenancy seem to be the only variables; as a tenant you stand most to gain by being a long term resident, as rent is lower; and the different neighbourhoods in Pumwani have different standards of housing, whereby the rent is adjusted accordingly. Tenants normally have lower class status than landlords or landladies, although factors such as administrative or political commitments and sometimes education or vocation may alter this. As described earlier, the landlord or landlady may also have varying social status depending on some of the other factors mentioned (business

ownership, landownership). This means that there sometimes is little to separate the social status of a landlady and her tenant, and respondents would often claim to have close friendships with their tenant or landlady. In other cases respondents were unaware of their friends being landlords. There is however, a great difference in the way landlords/landladies and tenants have been treated by authorities, both currently and in the past. So although there may not be much attention given to class differences between landlords/landladies and tenants within Pumwani, outside structures will categorically regard them as belonging to separate classes.

#### *Higher education*

A number of Pumwani residents have a higher education. Their academic training is mostly through college courses and diplomas that they acquire incrementally over a period of years, piecing together an education to best suit their possibilities of obtaining work. In addition, through institutions like St John's, youth are being trained as advocates for a series of issues, obtaining licences for their practices. Higher education has a limited affect on class standing, most likely because there is no direct link between high education and paid work. Still, higher education grants an individual higher social status (whether he is employed or not) than a person belonging to the same strata who is not educated.

#### *Vocation/Trade*

What kind of vocation or trade does the person engage in? This encompasses both those that work for an employer (employed to a trade), and those that are self-employed (hold their own vocation). Although the large majority of both these groups working in a vocation or trade do not own the means of production, there may be a need to distinguish between skilled workers in a sought after trade such as Jua Kali metal workers, carpenters, or Mitumba second hand clothes traders, and those living 'hand to mouth' with no specific specialisation. The difference between specialised and non-specialised workers may affect their social standing and economic possibilities. Also, there needs to be made distinctions between different forms of organising labour in Pumwani. In addition to classical employer-employee relations, and the self-employed, there are examples of e.g. wood carvers working in cooperatives to maximise on the possibility of getting their crafts sold (due to Pumwani being a stigmatised place, potential customers are hard to come by. The crafts thus have to be exhibited outside of Pumwani – often in the up scale shopping malls). A looser organisation of labour is often evident in Gikomba market, where e.g. self-employed Mitumba clothes sellers will actively use their affiliations with other sellers in the market to borrow and

lend (rather large sums of) money for business purposes. Individually each clothes seller will have little in terms of capital to buy up stock. If money is pooled for short periods of time (hours, sometimes only minutes), more stock can be bought and resold at a profit. This type of cooperation is verbally agreed upon (it can perhaps be seen as a code of conduct), with several such transactions taking place each hour.

#### *Unlicensed trade/Casual labour*

The most marginalising of influences on class standing, yet common for many Pumwani inhabitants. Casual labourers cannot, due to the lack of longevity of their work, plan ahead to make investments. This makes people partaking in unlicensed trade and casual labour less able to navigate out of their class. Due to the lack of security in their work relations they also risk falling prey to speculation by employers, and have the most to lose in employer – employee relations. I chose to focus on a legal-illegal division rather than the unclear informal-formal divide as there are most noticeable differences in attitudes, requirements, and desires between licensed workers and unlicensed workers.

### **Identification of social groups**

On the basis of the forgoing factors, and interviews with respondents regarding key current issues in Pumwani, I suggest that six distinct, current social groups can be identified. These are; 1) landlords as businessmen and political and religious figures (the bourgeoisie), 2) middle class businessmen/entrepreneurs (landlords or not), 3) landlords as homeowners (lacking business aspirations), 4) entrepreneurs with middle class aspirations (traders, stall owners, front porch duka owners, etc.), 5) tenants with middle class aspirations (office employees, clerks, educated, teachers, clergy, etc.), and 6) proletarian tenants (temporarily unemployed, informal sector workers, petty traders, licensed hawkers, craftsmen).

In addition, two institutional groups with a high degree of influence in Pumwani need to be added in order to complete the list. These are; 1) NGOs, and 2) the Chief and District Officer.

Though clear differences exist between the suggested groups it can be difficult to assess whether defining aspects for e.g. landlords as homeowners make them a more powerful or moneyed group than entrepreneurs with middle class aspirations. As such, these social groups are not necessarily tiered, and should rather be seen as relational to one another. The point is not to ascertain with certainty the number of groups present in a community. Nor is it to make clear distinctions between them. Certain respondents may

be between groups such as I have defined them. The point of this exercise is to suggest examples of groups to show that this mapping method makes it possible to uncover social differences within a community.

Moreover, with this approach, it is possible to identify the spatial practices of such groups. I have therefore chosen to juxtapose the following descriptions of social groups with images of some of the ‘signature’ activities engaged in by the respective groups. I do this to exemplify a basic but important point: that photographic material can be helpful to mapping by visually enhancing descriptions, thus making the spatial implications of these groups’ practices clearer.

What follows are description of the six social groups identified in this research.

*Landlords as businessmen and political and religious figures (the bourgeoisie)*

Individuals belonging to this group will hold land with substantial value (elsewhere), will have distinguishing political or administrative commitments, will be operating a business of substantial value and turnover, will own one or more houses and structures in Pumwani, will most likely be an employer, will most likely have long standing family relations to Pumwani (where the family most likely has always had a prominent societal position), may have monetary wealth in addition to investments, may be a landlord, and may in some occasions have a higher education.

This group is an elusive group. Partially because most do not reside in Pumwani, and partially because they are hard to get to, with urgent business in various parts of the city and elsewhere. Numerous attempts were made to schedule interviews with several representatives from this group. Several interviews were scheduled, but were moved constantly shifted around by the would-be respondents. In the end, most proved too elusive to track down in person, some eventually declining to meet. This was the only group where this happened.

One interview was held with a high-ranking representative of the Kenyan Central Organisation of Trade Unions (COTU), a historically significant political institution with its headquarters in Pumwani. The respondent had been living in Pumwani since 1969 when he had been “given an apartment in Calfonya by Mr Mboya when it was built” (Respondent TU 2012). He started his career before independence as a personal secretary to Tom Mboya, one of the major political figures in Kenyan politics before and after independence. Mboya’s picture was on the wall – facing that of current President Kibaki on the other. The respondent had served time in prison during the Moy regime



Figure 8.1 Pumwani Riyadhha Mosque under construction in 2012 (author).

due to his political stature, and gave the impression that he still was well connected in political circles. He also adamantly claimed that Pumwani would be redeveloped soon.

Questions about poverty, class divisions, or even political organisation and union membership were given elusive answers or downright shrugged off.

Though this elite group may be elusive, their presence is clearly visible in the form of buildings. Figure 8.1 is the imposing main Mosque built in Pumwani by the Riyadhha Mosque Committee, with a leadership rumoured to be well connected in political circles. The land on which the building sits has been Mosque property since the 1920s (thus allowing for construction with permanent materials), and there used to be a smaller Mosque on the site. The new building is however frowned upon by many. Even Muslim respondents felt that it was too large and imposing for Pumwani (respondent AYA 2012).

Figure 8.2 is perhaps a less imposing structure, but none the less daunting in feat. Built along Lamu Road in Sofia it is an example of a building that utilises permanent materials in construction. Since Pumwani’s inception only temporary buildings have been allowed erected on NCC land. The building is a commercial building with shops, and is owned by a local politician and



Figure 8.2 Example of use of permanent materials in building under construction in Sofia, Pumwani in 2012 (author).

businessman. Whether the building is a result of the politician buying land from the NCC, or if he has been granted exemption from the by-laws, or if he simply has disregarded them and built illegally, it is in any case an example of the differences in possibilities between the elites and the remaining population in Pumwani.

*Middle-class businessmen/entrepreneurs (landlords or not)*

Individuals belonging to this group will be operating a business of relatively high value and turnover, but might also have relatively high expenditures in

their business. They will own one or more houses and structures in Pumwani, will be an employer, will most likely have long standing family relations to Pumwani (where the family most likely has always had a prominent societal position), will most likely be a landlord, may hold land of value elsewhere, may have political or administrative commitments, may have monetary wealth in addition to investments, and may in some instances have some form of higher education.

Respondent RMC is an elderly middle-class businessman and an important social figure within the Muslim community. He was born in Mombasa in 1946. His father was from Yemen, while his mother's family hails from the Rift Valley. His grandmother was one of the original house owners in Pumwani. Respondent RMC was in possession of the original allotment letter from 1923. Having traded in hides and coconuts – shifting back and forth between Nairobi and Mombasa, he came to own his grandmother's house in Pumwani in the early 1990s. Before that he rented in Calfonya "some time after it was built" (respondent RMC 2012).

He is now retired and rents out rooms in Pumwani, while owning property in Mombasa as well as in Yemen. He also runs an M-Pesa business<sup>1</sup> along Juja Road, but does not consider this a proper business. 'Real' businessmen don't live in Pumwani, he says. Pumwani is for the poor. Still, he has managed to put all three daughters through university in IT and Management (his own education is basic, up to Standard Six). He wouldn't want for his daughters to move to Nairobi as "Nairobi is only for business, in Mombasa the rates are better" (respondent RMC 2012).

Respondent RMC is seen as a community leader among Muslims. He is a well-respected member of the Riyadhha Mosque Committee and is in charge of running their local charity that donates funds to Pumwani's poor. The charity collects money during prayers in the Mosque, where people will contribute 10 or 20 shillings. Despite having his family in Mombasa, the respondent feels he needs to stay in Pumwani because "they need assistance, and few are trusted". "Where there is money," he adds: "there is a problem" (respondent RMC 2012).

He plans to invest extensively in the house he owns. The structure will be torn down and re-erected in the same form. The structure will be of mud, but he plans to improve it by "plaster(ing) it with good cement", putting in a better ceiling, and a cement foundation. This will amount to roughly 1.2

<sup>1</sup> M-Pesa is a popular mobile phone based money transfer system. ('M' is for 'mobile' and 'pesa' means 'money' in Swahili).

million Kenya Shillings<sup>2</sup>, money he believes he can raise. The goal is to increase rents. But he adds, he wouldn't want to increase the rent too much because he knows what people are earning – and his tenants have been with him for a long time.

Reconstruction projects such as this are common among landlords that can afford it, and are normally approved by the NCC via the Chief.

Respondent LL-B is a young middle-class businessman based in Digo. He and his family operate a number of businesses: they rent rooms from two adjoining plots, they operate a licensed bar (reputedly the only one in Pumwani with toilet facilities), they sell vegetables in Gikomba farmed at their family plot in Kisii<sup>3</sup>, they own a barbershop, perform carpentry, and buy and sell Mitumba (second hand) clothing in Gikomba market.

Respondent LL-B's family are an old Pumwani family with ties to England. Though respondent LL-B describes his childhood as “challenging”, his mother comes from a middle class background: their grandfather operated the first African run newspapers in Nairobi (Folke Fredriksen 1995), and was a spokesman for Jomo Kenyatta (respondent LL-B 2012).

Due to his business affiliations and spread of social relations, respondent LL-B sees himself as mainly coming from Nairobi rather than Pumwani. His business in Mitumba clothing takes him to and from Tanzania. He feels obligated to stay in Pumwani due to the family businesses, but has taken steps to move elsewhere: he claims to have invested KSH 2 million<sup>4</sup> in a house in Embakasi, which was subsequently torn down by the authorities as it was erected illegally. The investment was lost.

Despite his aspirations to relocate, respondent LL-B also adds that the social cohesion – especially among younger Pumwani people – is a positive factor in the community, one that binds him to Pumwani. He belongs to a savings group, and has been affiliated with St John's Community Centre doing local outreach work. He identifies activities run by NGOs such as St John's as contributing to a growing sense of social cohesion in Pumwani.

Respondent LL-B is also central in the Pumwani Landlords Association (PLA), which has newly been resuscitated after having been dormant for some decades. Their main objective is to secure landlord and landlady interests in light of possible future redevelopment schemes.

The rental market in Pumwani is today considered to be saturated. Landlord and landlady respondents all agreed there are no available plots of land in Pumwani for expansions. If we compare images from today (Figure 8.3)

2 Approx USD 14 000.

3 Kisii is a town approx 300 km West of Nairobi near Lake Victoria.

4 Approx USD 23 000.



Figure 8.3 The density of extensions in Pumwani in 2012 (author).



Figure 8.4 Aerial view of Pumwani from Etherton (1971, 7). Caption reads: “The edge of old Pumwani, the Pumwani Redevelopment Scheme, and smoke rising from the remains of Kitui Village - a former ‘Temporary Urban’ settlement which housed about 500 families.” The image shows that the Majengo houses in ‘old Pumwani’ had very few extensions in the late 1960s and early 1970s.

with images from the early 1970s (Figure 8.4), expansions in the form of building extensions seem to have been erected between Independence and today. Sources indicate that there were 144 illegal extensions in Pumwani in 1964 (Farnworth 1964), and 900 in 1970 (Bujra 1972). Today, the density of extensions and infill make access to some areas difficult. The impossibility of further expansion means that landlords today have few possibilities for expanding their income base. The resurrection of the PLA can thus be seen as an attempt to better secure future income on behalf of landlords and landladies.

*Landlords as homeowners (lacking business aspirations)*

Individuals belonging to this group will own one or more houses or structures in Pumwani, will be a landlord or landlady, will have long standing family relations to Pumwani, might be operating a business, might be an employer, may hold medium to small plots of land elsewhere, and can sometimes have monetary wealth in addition to his/her house.

Respondents in this group distinguished between themselves as live-in landlords, and more affluent landlords that have moved out of Pumwani.

“There are three kinds of people in Pumwani”, said one live-in landlady: “the high class, the low class, and the lowest class” (respondent LL-D 2012), indicating that she belonged to the “low class”, while absentee landlords were “high class”.

One implication of this division was that the respondent identified more with her tenants that also were “low class”. Indeed, some tenants and landlords or landladies described their relationships as cordial, even as long standing friendships. Respondent LL-D has known some of her tenants for 50 years. Such bonds are somewhat rare in the harsh rental markets in Nairobi’s popular settlements, and undoubtedly add to the sense of social cohesion between many Pumwani residents.

One of the practical results of cordial relationships between some landlords/landladies and tenants is that buildings are better maintained. Tenants will normally fix electrical problems, leaky roofs, loose doors etc., while landlords/landladies will front expenses for materials.

Like most landlords or landladies, respondent LL-D can trace her family back several generations in Pumwani. She takes pride in her heritage. Like many Pumwani residents she can also trace her ancestry to the coast. Her grandfather was originally from Mombasa and settled in Pumwani after working for the Railways.



Figure 8.5 Mitumba clothing on sale in Gikomba Market in 2011 (dailystruggle.tumblr.com)

Despite her animosity towards absentee landlords – that she feels do not care about Pumwani and “have let people down” – she would want to resettle somewhere “where housing is good and the environment is good” (respondent LL-D) if given the chance. Unlike the middle class landlord respondents, respondent LL-D did not have any business besides the one generated by the 20 rental units she owns, and does not have the financial means to relocate. Her desire to relocate is driven by the substandard quality of housing and infrastructure. She would be very happy “if they were to reconstruct Majengo like High Rise”. That would alter her desire to move out. If she was to move out she wouldn’t sell. Not because she isn’t allowed, but because Pumwani would still be “home sweet home”.

Respondent LL-D does not know of any institution or group that can help her achieve her aims. She is a member of the PLA. She feels it might help to have one voice as landlords and landladies, and that they could make changes to Pumwani. Since she became a member in 2010 it hasn’t been that successful. Not many show up for meetings. Still she hopes that if the 300-400 (her figures) landlords and landladies could come together they would represent a viable political force.



*Entrepreneurs with middle class aspirations (traders, stall owners, front porch duka owners, etc)*

Individuals belonging to this group will be operating a business with the need for capital investment, may often have employees (casual labour), will often be a tenant, will often be trained in a vocation or trade, may have family relations to Pumwani, may hold small plots of land elsewhere, and may have some form of higher education, though is often times self-taught.

One respondent belonging to this group is a Mitumba<sup>5</sup> trader in Gikomba market (Figure 8.5). He grew up in Pumwani with his mother and sister. His success in business has allowed him to shift to a two-bedroom apartment in Calfonya with his wife and their daughter. Rent is four times that of his previous rental in Pumwani. In addition he fronts both his mother and nephew's rents "and each and every day provide food for them" (respondent AT 2012).

He has primary school education. His prowess in business and trade was learned through work. His time in Gikomba, he says has made him grow as a person. Respondent AT describes the relations between traders like himself and the landlords in Gikomba as both "amiable" and "cordial" (respondent AT 2012). During the interview sessions with respondent AT his phones would constantly be abuzz, some of which he answered, others he ignored. His business takes him to many affluent areas in Nairobi. He has clients that "you normally just see on TV", that he has befriended.

But despite his social life transgressing borders, he claims to remain Pumwani at heart. Still, he feels that life can get too comfortable in Pumwani because "everything is cheap". Through his work he sees himself as able to challenge himself to "move to another level", and to challenge "the rest who you left behind" (respondent AT 2012). Shifting to Calfonya did not make him less fond of Pumwani, but he refers to his old neighbourhood as a place where people don't grow, and he wishes to help others to grow because he has "always been a leader" (respondent AT 2012). His move to Calfonya is proof to him that even in Pumwani it is possible to move upwards.

Respondent AYA is a taxi driver. He has tried his hand at many trades earlier, but settled on taxi driving because he felt it was something he was good at. His driving takes him mostly to the CBD, as well as the Eastern and Southern parts of Nairobi. He is less familiar with the affluent suburbs. His main clients are in Pumwani, many of who do not travel much outside their neighbourhoods. He feels they come to him because he knows the city well.

<sup>5</sup> Second hand clothing brought in to Mombasa or Dar es Salaam ports in bales from Europe or USA.



Figure 8.6 Car wash enterprise belonging to up and coming entrepreneur group (author).

Respondent AYA is a devout but practical Muslim. Work takes precedence over prayer. "I can pray when I get home," he says (respondent AYA 2009).

Respondent AYA is, unlike many Pumwani residents, not born in Pumwani. He originates from the coast, but grew up in Kampala. While his father and brother were temporarily living in Pumwani, respondent AYA came to stay with them in 1995.

His line of work is capital intensive. In the three years that I have known him he has changed cars four times. The last time involved purchasing the car from Japan over the Internet, and struggling with customs clearing issues. Respondent AYA's newest taxi has adapted pedals and a retrofitted hand operated breaking system due to his disability. An early bout of polio left one leg crippled. Because of this he is unable to perform well in other jobs. When driving his disability becomes an advantage because of the disability sign on display on his windshield. It provides better parking spots, and the police are friendlier, he says.

Like many entrepreneurs, respondent AYA is constantly on one of his mobile phones with clients. What business he cannot take care of himself he forwards to other Pumwani based taxi drives that he trusts. But they rarely send business his way, he complains.



Figure 8.7 Skype meeting with Liberian based NGO (author).

Uprising CBO is an entrepreneurial group effort. As individuals its members would be considered unemployed, but as a group they constitute an up and coming business enterprise in a Pumwani context. Many other respondents indicated that they look up to the achievements of the group. Since I came to know of them in 2009, they have ventured into several business enterprises, all with spatial implications: a carwash (Figure 8.6), a hot water shower, a matatu service, a two-storey CBO headquarters, and amalgamation of nearby plots. Uprising have been able to secure the allotment letter for the plot that they previously rented, and are now in the process of attaining the title deed for the land, although most other respondents consider this impossible. Uprising's aim is to build a permanent structure on site, and to make money as a proper business with a proper shop.

*Tenants with middle class aspirations (office employees, clerks, intellectuals, teachers, clergy, etc.)*

Individuals belonging to this group will have higher education, will often be a tenant, will sometimes have employment, may have family relations to Pumwani, may hold small plots of land elsewhere, may have political or administrative commitments, and may often run a 'side business' related or unrelated to profession – until 'proper' work is found.

Respondent BS comes from an old Pumwani family. His grandfather was active in politics, but was disillusioned by developments in the country. His mother held a job in industrial area until she was retrenched in the 1990s. She lives across the road from respondent BS in Sofia. Respondent BS holds several diplomas from colleges in Nairobi. He is currently employed by a Danish NGO working in Liberia, and plans to return to Pumwani when his tenure is up. While in Pumwani, he kept in regular contact with his employer via Skype and email (Figure 8.7).

With his education and skills, coupled with his background from "the slums", respondent BS fits in comfortably anywhere in Nairobi. He can attend meetings at the UN or exchange niceties with the prostitutes living down the street from his house in Pumwani. His contact network is wide, transgressing social boundaries. But his home will always be Pumwani, he says. This is where he grew up, this is where his friends and family are. He is proud of where he comes from. He considers himself and his friends to be part of "an intellectual elite in Pumwani" (respondent BS 2012). They are all deeply involved in St John's affiliated community work in Pumwani, and enjoy considerable respect in some circles for this. His friends are all educated with a variety of jobs and professions: one is a Government Clerk, another has political commitments, others work in the Industrial Area, and yet others are temporarily unemployed.

*Proletarian tenants (temporarily unemployed, informal sector workers, petty traders, licensed hawkers, craftsmen)*

This is by far the largest and most varied group in Pumwani. Individuals belonging to this group will be tenants, will sometimes be trained in a trade or vocation, will sometimes have employment (often casual), may often run a 'side business' related or unrelated to profession – until 'proper' work is found, may have family relations to Pumwani, may sometimes hold small plots of land elsewhere, and may sometimes engage in unlicensed/illegitimate activities.

Within this group I have chosen to highlight two trades that stand out for various reasons. Pumwani beer brewers run businesses that are a partially licenced, and partially illegal. Prostitutes perform illegal services, but are a group of historical importance in Pumwani, that at one point had a certain political power in the community (Bujra 1972).

Beer brewing has historical significance in African settlements in Nairobi. The beer brewing trade is centred on one of the main thoroughfares in Digo where open air brewing is performed in the street (Figure 8.8). The thoroughfare is encased in the distinct, sweet odour of fresh maize-based



Figure 8.8 Open air beer brewing and food vendors along main thoroughfare in Digo, Pumwani (author).

malt sugars, mixed with smoke from the numerous coal fires that supply heat for the saccharification and mashing processes. For each brewing pit there is a bar, often found in covered up front porches to the original Majengo houses facing the street. The brew is stored indoors in open-air containers, allowing for air circulation and pollination. Due to the uncontrolled fermentation the beer will vary in taste, but will most times have a stringent, sour taste to it. Bars are oftentimes simple mud constructions with a table and benches to sit on. Beer is scooped out of containers and served in tin cans, jars, or mugs. This constitutes the licensed activities of beer brewing.

At the back most beer brewers will also produce illegal beer, a stronger carbonised brew that derives from the legal beer production. As such unlicensed production is ‘common knowledge’ even among the authorities, the beer brewers complain about regular harassment from police and the Chief (respondent BB 2012).

Prostitute respondents indicated that though their standing in Pumwani has been historically powerful, this is no longer the case. The sense of community that White (1990) describes is according to respondents no longer present. There is little trust between the prostitutes, who are mostly brought together

by spatial constraints. Prostitutes rent rooms in a given few alleyways in Digo and Mashimoni.

Their decline in power and group cohesion is perhaps explanatory. While many of the original prostitutes in Pumwani were house owners and landladies, none of the respondents I interviewed knew of existing prostitute landladies. The historical power of prostitutes did not necessarily stem from their trade, but rather from their position in society as landladies. As such the sense of community described by White may also be explained as a result of house ownership rather than through the commonality of professions. Today, prostitutes are tenants, paying considerably more for their rooms than other tenants (respondent MP 2012).

#### UNCOVERING CURRENT ISSUES

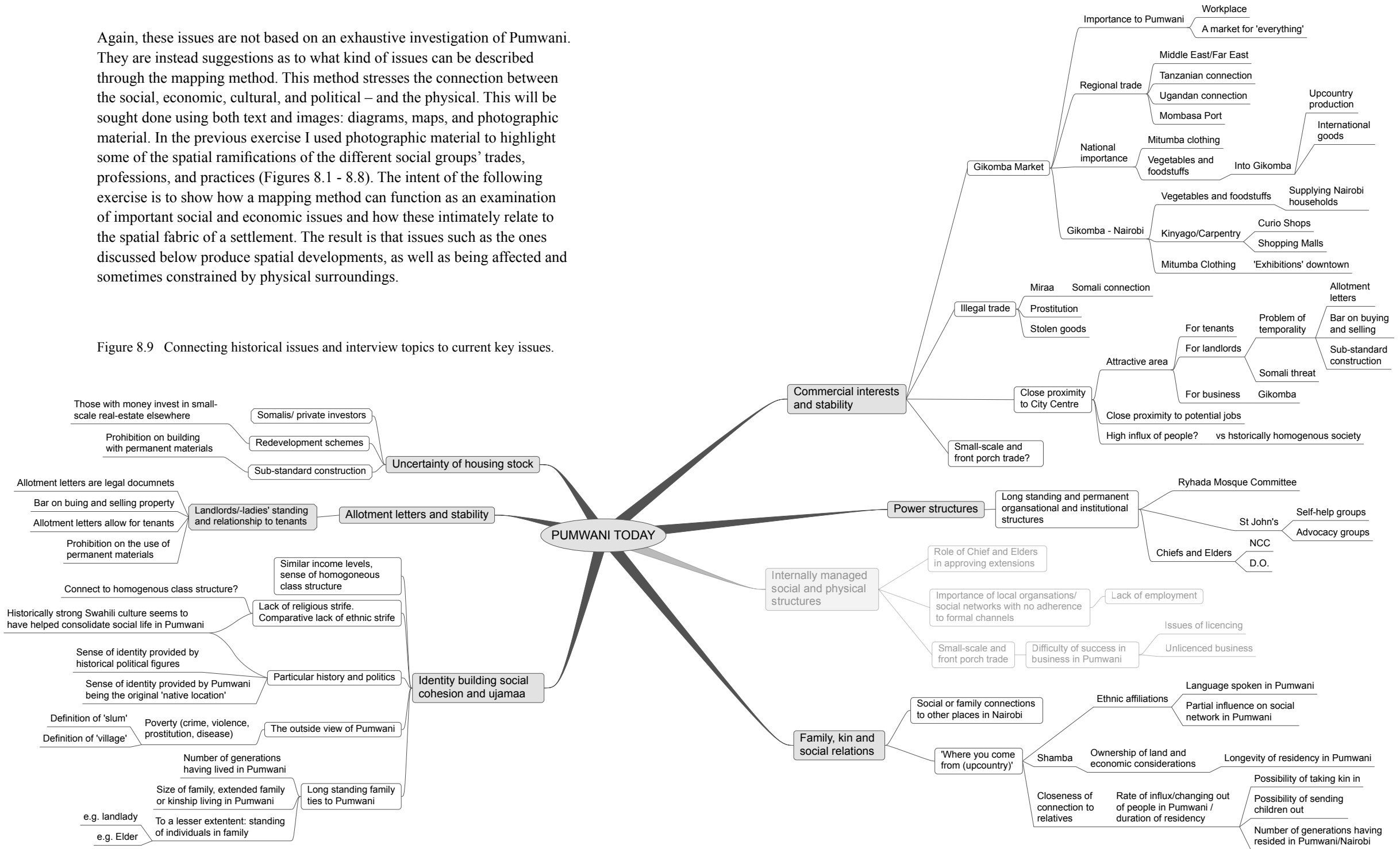
Based on the influential factors and the updated list of social groups, it is now possible to revisit the historical key issues in Pumwani in order to ‘bring them up to date’. If we revisit the issues brought forth in the historical analysis in the previous chapter, changes have occurred which slightly alter the focal point of key issues today. For instance, when looking at the historically driven *cultural conservatism* that has been important to Pumwani, it is more fitting to today talk about *power relations*. Thus the key historical issues brought up under “cultural conservatism” in the previous chapter, are here discussed further under “power relations today”. Also I have chosen to omit the historical issues connected to *internally managed social and physical structures*. Interviews and research carried out for this thesis clearly indicate that although Pumwani society – socially as well as physically – can be construed as historically having internally managed social and physical structures (in want of formally managed ones), the situation today is that most all of Pumwani society adheres to formal (external) structures.

Figure 8.9 is a visual representation where the topics discussed in interviews are connected to current key issues. These are; identity building, social cohesion, and ujamaa today; family, kin, and social relations today; power structures today; allotment letters and stability today; uncertainty of housing stock today; semi-legal trade today, and; commercial interests and stability today.

The visual representation of Figure 8.9 is only one of many possible ways in which to ‘organise’ important topics in Pumwani. It helps make connections between respondents’ stories and larger issues. Other visual representations may yield other connections than the ones made here.

Again, these issues are not based on an exhaustive investigation of Pumwani. They are instead suggestions as to what kind of issues can be described through the mapping method. This method stresses the connection between the social, economic, cultural, and political – and the physical. This will be sought done using both text and images: diagrams, maps, and photographic material. In the previous exercise I used photographic material to highlight some of the spatial ramifications of the different social groups' trades, professions, and practices (Figures 8.1 - 8.8). The intent of the following exercise is to show how a mapping method can function as an examination of important social and economic issues and how these intimately relate to the spatial fabric of a settlement. The result is that issues such as the ones discussed below produce spatial developments, as well as being affected and sometimes constrained by physical surroundings.

Figure 8.9 Connecting historical issues and interview topics to current key issues.



**Identity building, social cohesion, and ujamaa today**

Pumwani is different from the rest of Nairobi. All respondents seemed to think the same. Even other ‘slums’ and settlements are oftentimes not like Pumwani. In Pumwani people are friendly with one another, Pumwani is more orderly, Pumwani is more Swahili, Pumwani has a history – it was there before much else. Pumwani is unique in those respects people would say: the place has a unique identity with a strong sense of *ujamaa*<sup>6</sup>. But when asked why, answers would vary. Unprepared it was is hard for respondents to give answer to such a complex question. *Why is there a sense of ujamaa in Pumwani?* But it is certainly there, they would hold.

If the residents did not have a readily available answer to the question, that in itself is perhaps a clue. Speculatively, the underlying causes for a community’s social cohesion, specific identity, and strong sense of neighbourhood are complex and manifold. What kinds of bonds are present in a place that allow children to play in the street, clothing to be washed and dried communally, Muslims and non-Muslims to interact, and toilet facilities and water taps to be taken care of? Such issues may be easily observable (Figure 8.10), but their root causes may not be readily apparent. Such root causes are important when seeking knowledge about a place and its people. In order for interventions to succeed and compliment existing socio-economic bonds, these root causes need to be mapped.

In Figure 8.10 I have used a photograph as a background for investigating root causes. The same exercise could also have been carried out through sketching, which deliberately slows down ones observations, and where dwelling on details allows the sketch-maker to see similarities, differences, and anomalies that a passer by might not notice. Although many architects prefer sketching over photography for exactly this reason, I have here used a photograph in a way that produces many of the same results as a sketching exercise. Objects are connected to one another. Other objects stand out as curious in relation to their surroundings. Most of the image is toned down to highlight certain details, and questions are asked as a starting point for investigations. Figure 8.10 is one example of an exercise that can be duplicated in many settings with similar results.

6 Swahili: brotherhood – used as a term to indicate cohesion or bond.

Figure 8.10 Ethnic, religious, and inter-generational diversity in the streets of Sofia, Pumwani, 2012 (author). >



Much of what is highlighted in Figure 8.10 relate to issues of identity and ujamaa. These are things that are visually apparent in the streets of Pumwani, such as the Muslim attire, and the common wash areas. Through the photograph (or the sketch) these can perhaps be described as visual expressions of identity. But these visual expressions are only indicative of the sense of ujamaa in Pumwani. In order to get to the core of Pumwani's identity we need to dig deeper. Returning to the interviews, a number of factors that were touched upon by the respondents seem to be of significance. As people told of their stories and their relationship to Pumwani, they made connections between their own identities and the history and politics that have shaped Pumwani. All respondents were fully aware of the main historical events that have come to form Pumwani, and a clear sense of resident identity seemed to spring out of the area's history. For most respondents there was a sense of pride connected to this identity. Younger people took pride in current events. Older people took pride in things past. People in power took pride in both past and present. Issues that were particularly mentioned were: planned layout, orderly Majengo houses, better infrastructure than elsewhere (especially water), resourceful youth groups, Swahili culture (mainly lingual, in the sense that Kiswahili was chosen over other tribal languages), landlords and landladies, women's standing in society, and political resistance. The fact that Pumwani was the original African location in Nairobi – and that many prominent (historical) political figures had close ties to Pumwani – was mentioned by many. Tom Mboya and Jomo Kenyatta are political figures that were often brought to the fore. A common misconception among most residents was that they both lived in Pumwani. Some respondents would word it cautiously, as in: “they say that Mboya and Kenyatta used to live here,” as if they were hoping it was true. Because there is a real sense that the history and ‘golden age’ of Pumwani has passed or is in the process of disappearing. Others indicated that thought these particularities of Pumwani's history were gone, new structures emerging in Pumwani were positive in a different way: the changes in the way larger organisations like St. John's operated were particularly mentioned, especially by younger respondents with regard to St John's focus on youth.

Identity, social cohesion, and unity in Pumwani are strengthened because Pumwani is marginalised by the ‘city proper’. To the rest of the city Pumwani is known for its crime, prostitution, and drugs, many respondents said: “if you catch a *matatu*<sup>7</sup> from town and let them know you are getting off in Majengo, everyone on board will hold their pockets out of fear of being robbed.”

The belief that the rest of Nairobi mistrusts people from Pumwani creates a bond between local residents, and bolsters determination to disprove such negative views. Most respondents believed that people from outside had a

negative view of Pumwani because they believe it to be a slum. Such singular representations of Pumwani seem to strengthen the sense of unity among Pumwani residents. Many, but not all respondents referred to Pumwani as a slum. The word is often used derogatory, but some pride is also taken in ‘coming from the slums’, as it implies that you are street smart and savvy.

Internally the term ‘village’ is also used to a certain degree – indicating informally constructed neighbourhoods such as Kitui or Kinyago, where there ‘is little order’, buildings are haphazardly placed, and streets and alleyways are unplanned. The villages are seen by Pumwani residents as being less urban than Pumwani ‘proper’. Indeed, places like Kitui and Kinyago are not part of historical Pumwani, and administratively they are also outside Pumwani Ward, making the use of the term ‘village’ even more cogent.

There are internal differences in Pumwani ‘proper’ as well. The historical centre of Pumwani is called Majengo – referring to the area's Coastal Swahili-influenced building style. The area is made up of several smaller neighbourhoods: Sofia, Digo, Mashimoni, Katanga, and Bash. Although the Majengo houses are one of many unifying features in Majengo, there are internal differences between the neighbourhoods that distinguish them from one another.

There are historical differences: Sofia and Digo were established before Mashimoni. Bash and Katanga have become distinct neighbourhoods only during the last few decades. Bash may have been adopted as a neighbourhood name during the 1980s when parts of Majengo were demolished to make way for new high-rise developments. As the original Majengo houses were torn down, residents were forced to move out, and the once strong social Muslim bonds that held together the neighbourhood disintegrated. The high rise developments house lower middle class tenants, many with strong connections to the Muslim community in nearby Eastleigh. As a result, the area became distinctly different from adjacent Sofia. It would have made sense to distinguish the neighbourhoods from one another by giving Bash a name of its own.

There are infrastructural differences: Sofia is located at Pumwani's highest point. Houses are in relatively good condition. The communal wash areas and the drainage system seem to be in working order. Digo is located on a slight hillside next to the Nairobi River. The neighbourhood is the lowest lying area in Pumwani. Runoff from the rest of the community seeps through Digo, houses are more dilapidated, and communal spaces are uneven and without visibly defining features.

7 Swahili: minibus – the standard public transport system in Nairobi.

And there are socio-economic differences: in Sofia respondent tenants cooperate with their landlords to do repair work and maintenance on houses. Food is served on decorated plates with sturdy utensils. The political debate on TV brings friends and neighbours together. There is friendly banter. Most rooms are reasonably but comfortably furnished. Cuddly toys line the shelves. Relatives' and neighbours' kids come and go, all of them are offered a snack or a glass of soda. A computer comes out for a Skype conference with an NGO in Liberia. The day's paid work consists of preparing 140 lunch bags for schoolchildren sitting their end-of-term exams.

In Digo the beer brewer respondents are more concerned with their makeshift bars and have less interest in maintaining their rented rooms. The clients are mostly an adult male crowd. There are fewer children about. A woman sleeps off a hangover in the dark of one of the adjoining rooms. "Pumwani is home," the beer brewer says, but mostly because this is where her business is.

Pumwani 'proper' and the surrounding villages all have distinct identifying features that set them apart from each other. But they also share identities that bring them together. When discussing what interventions to implement in a place like Pumwani it is vital to the preservation of the histories and identities that residents take pride in to gain knowledge about these distinctions and commonalities. As exemplified in Figure 8.11, it is possible to visually highlight through maps questions such as; what are the subtle differences between the neighbourhoods; and through such visual exercises initiate discussions regarding what kind of interventions would work in Sofia that might not work in Digo, and what kind of interventions would play to their common identity. Such issues become important to map when seeking to do interventions.

If an intervention such as a redevelopment scheme requires mappers to assess the numbers of inhabitants – or the population growth – in the community, distinctions between Pumwani 'proper' and the surrounding villages also become important. Due to the many socio-economic links between Pumwani and villages such as Kinyago, these villages are sometimes included in discussions about Pumwani, and sometimes not. Project statistics may therefore include areas outside of the judicial boundary of Pumwani Ward – while official census figures will adhere to the ward boundaries. In addition, the ward boundary has changed over time, making historical figures and numbers incompatible with current ones. Questions such as: where does the boundary go; and what will be the (quantitative) repercussions of including this area in the mapping, are important considerations in any map – especially in popular settlements where 'informality' often seems to bring with it a careless juggling of numbers, areas, and statistics.

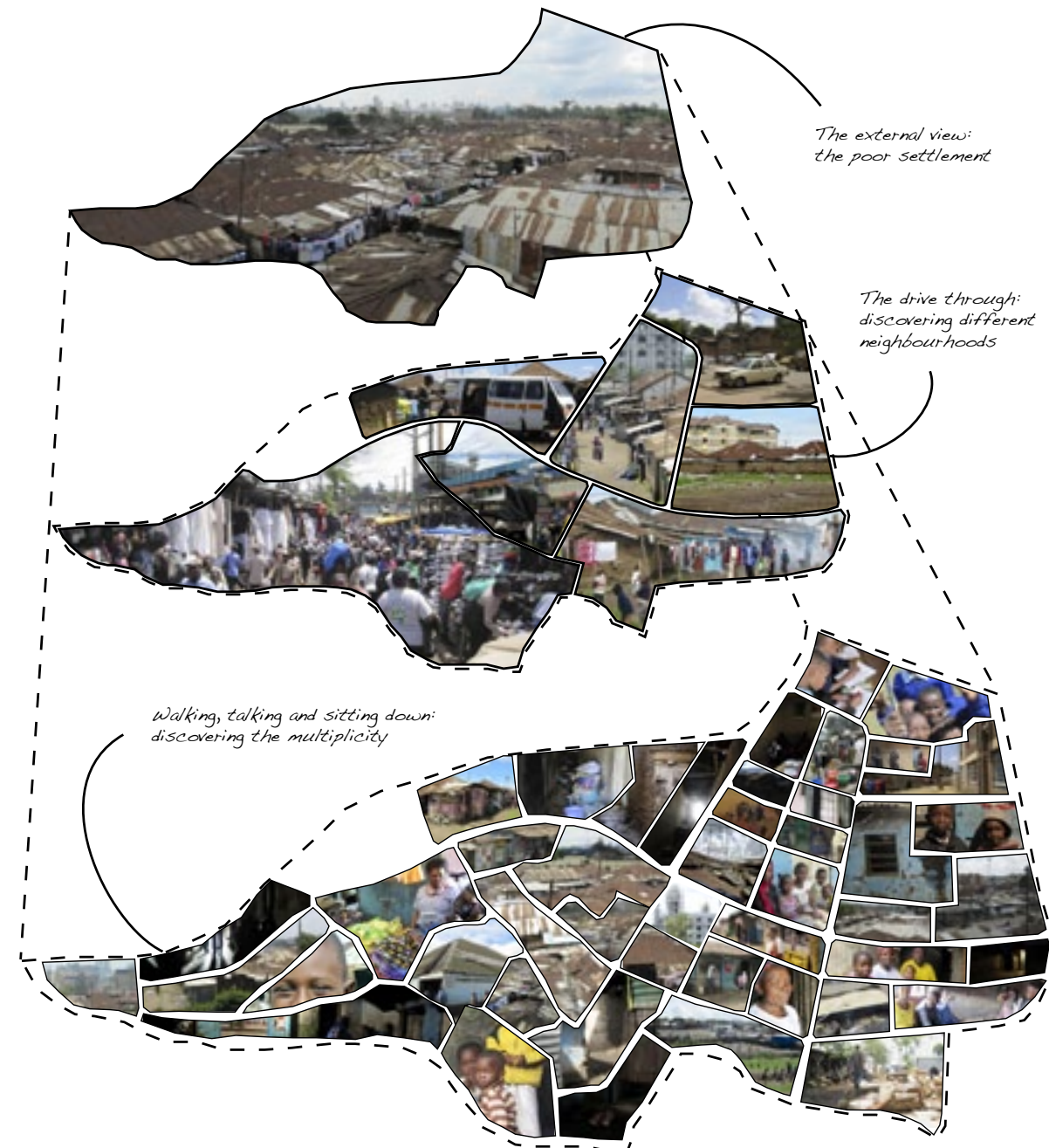


Figure 8.11 Maps of different resolutions asking what Pumwani is made up of.

An issue that perhaps is more correctly described as being a result of cohesion rather than a factor providing for cohesion, is the lack of violent conflict in Pumwani stemming from either religious or ethnic strife. The underlying factors contributing to this are deeply connected to Pumwani's history. Pumwani was one of few African urban settlements in Nairobi where no violence occurred in the after the 2007 elections. Though there are various reasons for settlements remaining peaceful during this period, it is possible to speculate as to some of the reasons why Pumwani remained unscathed.

Respondents pointed out that several people relocated to Pumwani in this period, as the area was considered to be safe, despite the fact that the ethnic make-up of Pumwani is diverse. Respondents were all clear on the importance of ethnicity, in that they knew what tribe people belonged to, and by extension where their family originated. Respondents were also, like most Kenyans, knowledgeable of the banter concerning certain tribes and their particularities (as in Kikuyus are greedy etc). Although stigmatising in other parts of Kenya, it is more correct to refer to this as banter in Pumwani as there never seems to be any gravity connected to remarks about tribe or ethnicity (except when discussing Somalis). None of the respondents saw ethnicity as a central issue to Pumwani life, although some respondents were mistrusting of rural-urban migrants settling in Pumwani. They felt that this influx of people – without proper backgrounds or understanding of the areas history – was changing Pumwani for the worse. The close proximity of Pumwani to the city centre makes it a lucrative alternative for newcomers, thus threatening the historical unity and sense of community that has characterised Pumwani (although accommodation is hard to come by, and as explained by out of town trader respondents, in most cases newcomers to Nairobi without connections to Pumwani have to settle elsewhere in cheaper, more remote locations). Interestingly, worries about the negative influence of outsiders were also aired by respondents in McVicar's study of Pumwani in 1969. Today, this distrust of outsiders is voiced in ways that were ethnically derogatory, as respondents saw newcomers as bringing in their 'ways' and customs from 'up-country', and favoured their own vernacular over Swahili in the streets, thus threatening the strong sense of ujamaa that used to be part of the identity of Pumwani. But just as much as wishing people from up-country away, and seeing their presence as 'ethnically threatening', respondents would also that newcomers adopt the more 'urban' ways of living in Pumwani, true to the history of the settlement and those families that have lived there for generations that are 'caretakers' of the past and the identity it provides. Historically, this has been a successful strategy in coping with the multi-ethnic makeup of Pumwani while still retaining a sense of homogenous identity. McVicar (1969, 134-135) shows through his field study of Pumwani that there were tendencies of groupings of tenants and landlords

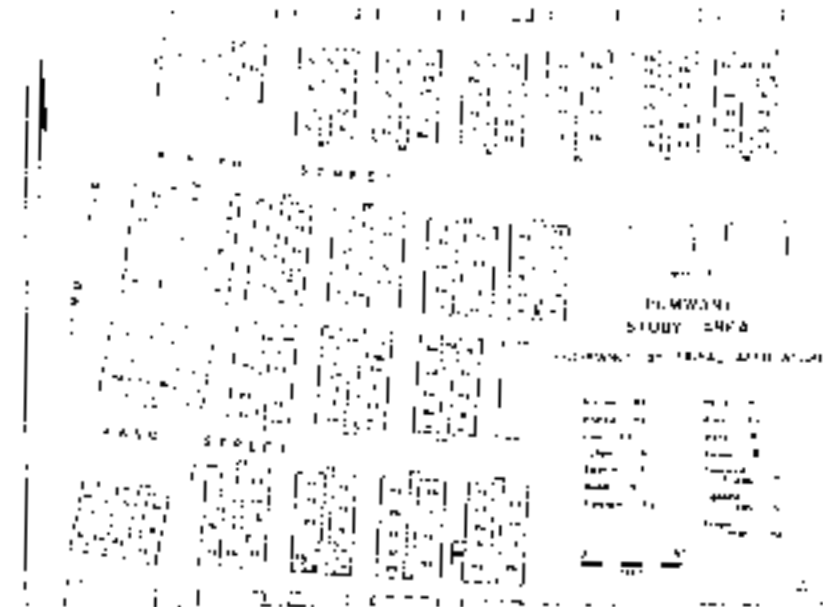


Fig 8.12 McVicar (1969, 135) maps ethnicity in Majengo houses in Pumwani.

of certain tribes in certain houses and streets (Figure 8.12). Still, he points out that even then, the ethnic divisions in Pumwani were minimal compared to elsewhere. He contributes this 'toning down' of ethnicity to the longevity of Pumwani as a location. Certainly, it would seem that today, 33 years later, ethnic issues are even less prominent, despite ample evidence that it is taken advantage of elsewhere in Nairobi with devastating results (e.g., the 2007 post-electoral violence). In my interviews, respondents were not aware of any organised groupings of ethnic character in housing blocks in Pumwani. It could be that the number of respondents was not large enough to pick up on such trends, but it could quite possibly also mean that with a generation having passed since McVicar's study, younger people in Pumwani are even less focussed on ethnic issues. After 2007 it became important to many of the young respondents to take a clear anti-ethnic stance. Equally important in this regard is that ethnical violence in Kenya is historically rooted in conflicts over land (Hornsby 2011, 8). Land is not as much a cause of tension and strife in Pumwani as elsewhere because of families having lived here for generations, weakening ties to rural areas (and lands in rural areas). People in other popular settlements in Nairobi are by comparison said to have stronger ties to rural lands.



Maps such as the one produced by McVicar bring up some important questions relating to the power of maps broached in Chapter One. In the quest for ubiquitous knowledge, private-public boundaries may be overstepped. When information about e.g. ethnicity is presented in a map such as the one produced by McVicar, privileged information is visually exposed, making respondents easily identifiable<sup>8</sup>.

Because of the lack of ethnical violence in Pumwani, exposing ones ethnicity may not be as dire as in other settlements. One respondent in the Riyadhha Mosque Committee has an answer to why there was no ethnical violence in Pumwani in 2007. “Tribalism is too important in this country,” he says: “even in Pumwani. But here we sit in harmony.” People are bound together by generations of intermarriages that have resulted in an interweaving of ethnicities and kinship. This has created peace “because you cannot hit your uncle, you cannot hit your aunt” (respondent RMC 2012). He continued: Integrated marriages are possible in Pumwani because of the history. This was an estate that early on brought together different tribes. The other settlements are not as old and are more ethnically homogenous.

Also, he says, Swahili is important. People speak Swahili in Pumwani. It creates a bond. People use Swahili attires and social services provided, he says. Then no one can tell who is from which tribe. Swahili is about more than being Muslim.

The lack of ethnical tension in Pumwani might also be explained through an historical focus on property. Ochieng’ stresses that: “the land issue had been at the root of most of Kenya’s political troubles” (1995, 87). Such sentiments are echoed by Hornsby who claims that the post-electoral violence in Kenya in 2007 needs to be seen in relation to land-based disputes between tribal groups, and that such tension have existed ever since land was made available on the free market, open for anyone to buy land anywhere in a country where “the idea of land as the specific entitlement of one ethnic community remains strong” (2011, 800).

One could argue that in the case of Pumwani, the conflict related to ethnicity and land becomes less of an issue because third generation Pumwani residents consider themselves to be urban, with stronger affiliations to the city than to their ancestral rural ‘homes’ and subsequent tribal affiliations and land disputes.

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<sup>8</sup> The same can perhaps be said for Figure 8.10 where random people in a street – perhaps identifiable in the photograph – become unknowing representatives of certain issues such as interaction between Muslims and non-Muslims, or as ‘wearers of Muslim attire’. Not always is permission asked before data is collected. Caution has to be taken in instances where it is easy to overstep public-private boundaries.

### Family, kin, and social relations today

Although Pumwani seems to be a self-sufficient community in many respects, it is not an island unto itself. People with friends and family living elsewhere in Nairobi would speak of visiting each other. Younger respondents would make these geographic transitions with relative ease. As would business people. Older respondents were less mobile, but still insisted on traveling to other locations in Nairobi to see their extended families. Most of these social bonds seem to flow out from Pumwani rather than into the community: respondents would indicate that they would go see their friends and family more often than friends and family would come see them. People from outside didn’t feel safe in Pumwani.

Mostly, these visits would happen within Eastern or Southern Nairobi where most of the popular settlements, lower middle class areas, and tenements are found. Only rarely would people from Pumwani have the need to travel to the more affluent suburbs in Westlands or Karen.

In addition to their Nairobi relations, people from Pumwani still have ties ‘upcountry’, despite having lived in Nairobi for several generations. “I’m from Pumwani,” people would say, but could also add that their parents or grandparents came from elsewhere. “My father was Akamba and my mother Luo,” or: “my grandmother still lives in Kisi”. As with their visits to friends and family elsewhere in Nairobi, people from Pumwani will travel upcountry, not only to see relatives, but also to tend to a shamba<sup>9</sup> in the rural areas that a relative might be looking after for them. When asked, many respondents indicated that their affiliation to their rural home was important: in insecure times it was one of many small economic pillars that people hoped could help secure old age.

Family ties upcountry also influence developments in Pumwani. Relatives will come to stay with family in Pumwani to look for work, while Pumwani kids might get sent upcountry for school. “This is not a very good place for children,” some respondents would say.

The influence of upcountry relations is discernable by the languages spoken in Pumwani. Sometimes you would hear other languages than Swahili in the streets. These were rookie errors, said some respondents. People who were born and raised in Pumwani speak Swahili. Only inside homes would vernaculars be spoken. If you spoke your vernacular in the street you were not from Pumwani: you were a newcomer, you were bringing change to an area that is proud of its history.

Social and cultural dynamics in a settlement are important to understand as a part of a larger societal context. The plethora of family ties and the

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<sup>9</sup> Small farmstead, or piece of land for growing crops.

connections made by residents to other places in the city and the country are indicative of a dynamic settlement that cannot be viewed as a singular, internalised object.

These ties disprove the constructed rupture between the ‘city proper’ and the slums; between the formal and the informal – distinctions that can be unhelpful and misleading when trying to understand the dynamics of popular settlement. By mapping the multiple connections that exist between a settlement, the city, and the country, not only does this force the analyst to consider popular settlements on equal terms as the rest of the city; it also helps uncover the diversity and multiplicity of popular settlements – harking back to the historical grounds for establishing Pumwani: that it was to be the location for ALL African peoples in Nairobi.

Historical changes also add to this complexity: social and cultural relations to the countryside may be disappearing. Such relations seem to have been more prominent in many of the studies done in the 1960s and 1970s, if compared to the feedback from respondents in this research.

**Power structures today**

Three institutional structures would always come up in discussions about organisation, power, and decision making in Pumwani: the Chief and his Elders, St John’s Community Centre, and the Riyadhha Mosque Committee. Although representing three quite different agendas: one being a judicial arm of the state, the other being a charity, and the third being a Muslim interest organisation, they also have some commonalities: they act as support structures for people in Pumwani, they have historical longevity in the community, and they present – each in their own way - culturally conservative worldviews.

St John’s Community Centre, John’s Church, and the Christian Industrial Training Centre are all historically affiliated organisations. Together they own large tracts of land in the northernmost part of Pumwani, demarked in Figure 8.13 in blue. The Riyadhha Mosque Committee own central, albeit smaller plots demarkated in brown. The Chief’s camp is located directly to the West of the Mosque’s land, marked in green. Together these organisations are large landowners in Pumwani. The figure also indicates the extent of influences these organisations have. The arrows in the figure are indicative, not actual. They illustrate a mapping exercise where locating and demarking spots that are connected to the three major organisations; buildings, shops, groups, or places, may provide a clearer understanding of the their spatial outreach and influence.

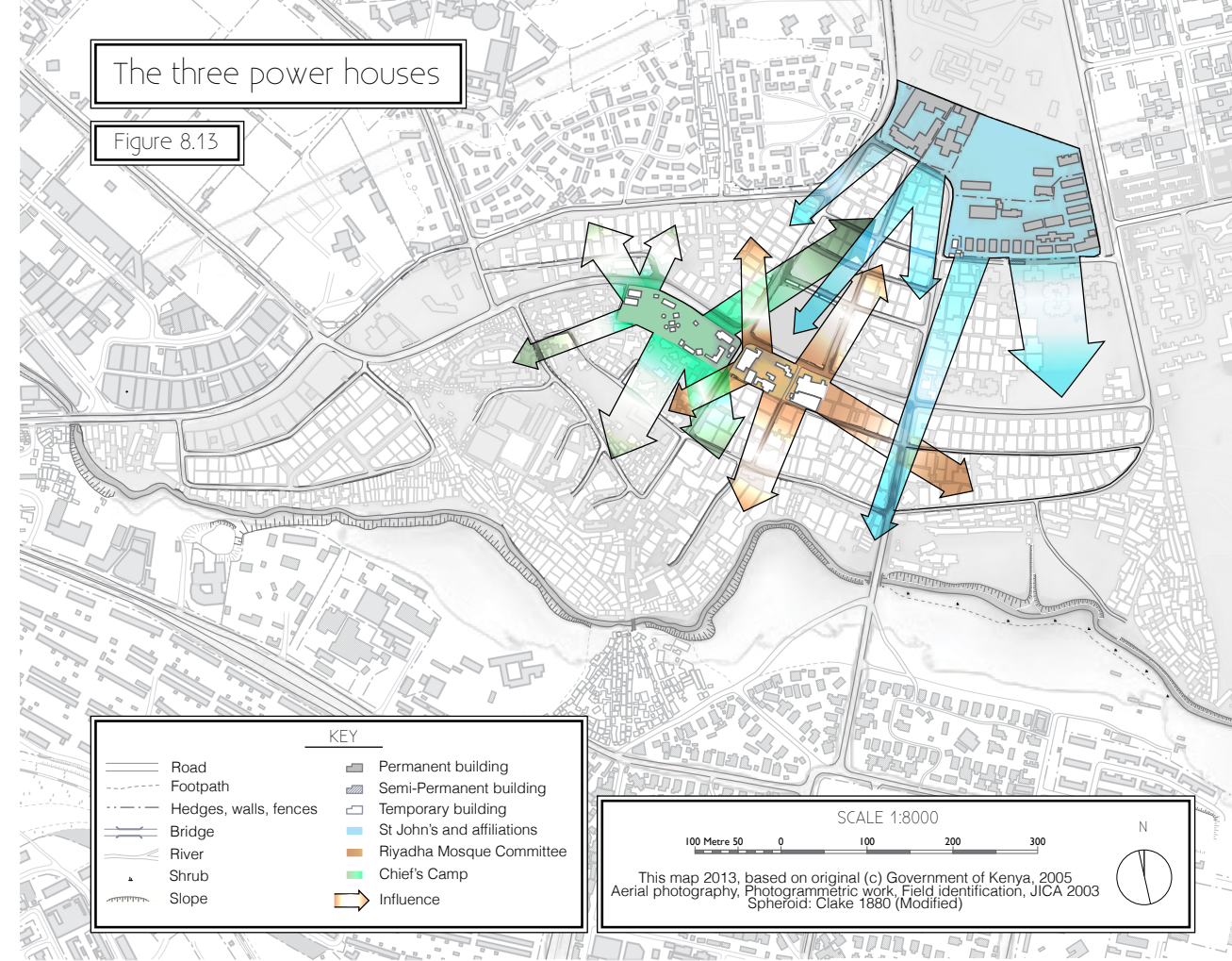


Fig 8.13 The three ‘power houses’ and their influence. St John’s Church and its affiliations own land in blue, the Riyadhha Mosque Committee own land in brown, and the Chief’s Camp is demarcated in green.

The organisations also express their power spatially in other ways. Because they are not subjected to using non-permanent materials as is the rest of Pumwani, buildings belonging to St John’s, the Church, the Training Centre, the Riyadhha Mosque Committee, or the Chief stand out from the rest as being larger, more durable, and affluent structures. This is exemplified in Figure 8.14 showing the inner courtyard at St John’s, providing children and youth with a welcome reprieve from the realities outside the compound. Together with housing projects such as Calfonya and Highrise, the architecture of the Community Centre is indicative to many Pumwani residents of what they might expect if the area was to be developed.



Fig 8.14 The main atrium at St John's Community Centre (author).

#### *St. John's*

St John's has a prominent position in Pumwani. Although it was formally established in 1957, the organisation hails from the Church Missionary Society that had been carrying out small-scale charity work in Pumwani since the 1920s. That is to say, St John's is an organisation that has always been present in the community, and has taken part in people's lives albeit in different ways over the past 90 years.

But Pumwani wasn't predominantly Christian to begin with. Much of Pumwani's history is rooted in Swahili culture. Though historical material shows that the informal organisational structure within the Muslim community was pivotal to the development of Pumwani, official Muslim organisations such as the Riyadhha Mosque Committee did not surface until much later.

Respondents did not necessarily make distinctions between the religious affiliations of St John's or the Riyadhha Mosque Committee. Yes, they are religious based institutions, each rooted in different cultures, but to respondents their ability to support the community was of equal importance. St John's was held in high regard. Christian or Muslim, it doesn't matter,

respondents would say. St John's will try to give support to anyone who needs it, no matter your creed.

Some respondents were more hesitant regarding the Riyadhha Mosque Committee, noting that they would only support Muslims. They would link this to the Committee being more 'old-school' and paternalistic. St John's may have been the same some years back. Sources from the 1970s (e.g. Bujra 1972) indicate that St John's was doing important social work in Pumwani at the time, but concern was voiced that it was run by outsiders, and not by people from Pumwani.

But this has all changed now. Today, even the leadership is locally based. The highly educated elite that runs St John's hails from middle-class backgrounds in Pumwani. The youth groups and CBOs affiliated with St John's are run by aspiring resourceful young people (for the most part men), many of whom hold college diplomas or other higher-education training.

Having carried out a baseline study in 1989 and a Participatory Urban Appraisal in 2005, St John's experienced a "clear shift from welfare to a more facilitative role in sustainability strategies" (respondent PSJ 2013). Their previous focus on charity and handouts was exchanged for a focus on self-help projects, and supporting smaller CBOs. Younger respondents valued this shift. Older people who were used to the handouts were less thrilled. St John's leadership however, considers this shift to be the organisation's pivotal achievement, and has resulted in a plethora of smaller neighbourhood-based groups and organisations that undertake specific tasks and projects. Many of these groups seem self-sufficient and well organised.

The connection between the youth groups and St Johns is today, according to the leadership a business-based one, where the CBOs are self-run. Communication between the youth groups is today run by a separate umbrella organisation set up by the youths outside of St John's.

The opposition that occurred as a result of these CBOs carving out niches for themselves in Pumwani, rocked the power balance in the community. The youthful community based organisations were pitted against the Chief. St John's acted as a moderator in this conflict, pushing a conservative line to try to keep the youth group CBOs in check.

"Some of the youth groups have over time been misused by political players," explains respondent SSJ, a St John's administrator. This caused the Elders and the Chief to have issues with the newly attained power of the youth groups. Tension arose between St John's and the Chief, given that the youth groups originated from St John's. The youth group CBOs were establishing forums where the role of the Chief and other elite groups were questioned.

Due to the grievances this caused the Chief, a system was set up where paralegal youth working in the CBOs had to go through training in order to understand the power relation between the Chief and the rest of the community. Police and Chief's representatives were also sent through paralegal training in order to enhance "cross-understanding" (respondent SSJ 2012).

St John's worked actively in this period to make the paralegals "understand that paralegal work was not about confrontation" and that it was about "building relationships with government agencies". Today the relationship between youth groups, the Chief, and the City is "so cordial" and "complimentary" (respondent SSJ 2012).

With the proliferation of CBOs, and with St John's focus on advocacy groups and teaching life-skills, young people affiliated to the CBOs have a greater knowledge of their rights and standing in society. Respondents indicated that a better relationship has developed between people in the community and the authorities: the Elders, the Chief, and the NCC. Many of respondents referred to the authorities as places they could go to seek assistance, and that they knew of examples of municipal services, such as garbage collection, being carried out in collaboration with CBOs.

#### *Riyadha Mosque Committee*

Respondents from the Riyadha Mosque Committee echoed St John's sentiments that there were no differences between Muslims and Christians in Pumwani. Neither did they see their own role as an organisation as dominant in Pumwani society. The Riyadha Mosque Committee respondent RMC presents a humble picture of his organisation and of Pumwani in general. Differences don't exist inside of the settlement, he insisted. The big differences are between people outside of Pumwani: in Westlands, and closer to town. This is also true for power, he continued. People and organisations in Pumwani have little political influence compared to outside of the settlement.

Still, the Pumwani Riyadha Mosque is an imposing structure. Its physical presence perhaps representing higher ambitions than the respondent would admit to.

The respondent would rather want to focus on larger societal differences: those between Pumwani and the rest of Nairobi. "Places like Pumwani are not represented in politics. Pumwani has no own representatives," says the respondent: "All leaders are from the outside." And if no one is there to represent Pumwani in politics, the residents' needs are not taken care of, he explains. He feels this leads to problems like lack of employment, a problem that has always been present in Pumwani. As a result people are poor, and

many chew miraa<sup>10</sup>, according to respondent RMC, who sees drugs and unemployment as related, and the main challenges in the community. Miraa is used in all social groups he holds. It is not especially related to Swahili culture. The drug industry in Pumwani and elsewhere is according to the respondent run by "big people". The people who sell on the streets are either locals, or traders that come from Meru.

#### *The Chief*

The Chief-system is a formal institution common throughout Kenya. Amongst others it allows for closer contact between residents and authorities. A number of Elders employed (or volunteering) under the Chief are each responsible for a neighbourhood in their community. The elders are known to most residents, and are go-to persons if conflicts arise in the neighbourhood. In the case of conflict between neighbours over housing matters the Elder and the Chief have the formal authority to mediate and make decisions with the aim to ameliorate relations between neighbours. The respondents were all of the opinion that the system worked well, and that conflicts were better solved in this manner than through other administrative channels further removed from the community. However, the system becomes problematic because it lends formal acceptance to actions that on a higher judicial level are unaccepted. Respondent CC, a Chief's Elder, explained how the Chief has formal powers to mediate and rule in disputes between neighbours over building of extensions or on other changes made to physical structures that lead to conflicts between neighbours. The rulings are often verbal, but are nonetheless formal, and more importantly, always seen as 'the law' by residents.

In effect, through his rulings, the Chief accepts the building of extensions that in other areas of the law are seen as unlawful.

The three 'power houses' in Pumwani do however not act on their own. They are all connected to larger national and international structures. The Chief is an extended arm of local government represented by the District Officer (D.O.). The Riyadha Mosque Committee is backed by Members of Parliament (Pumwani Riadha Masjid 2011) and the Supreme Council of Kenya Muslims. St John's is funded by a variety of NGOs, such as the Anglican Church, Norwegian Church Aid, and international Mission Societies. They are part of the Area Children Advisory Council, the Peace Committee, the Women Fund, Youth Fund, Kenya Network of Women with Aids, and Maji na Wanisi, a water and sanitation NGO (respondents SSJ and

<sup>10</sup> Khat. A plant where the leaves are chewed as a stimulant. A mild drug common to East Africa and the Arabic peninsula. Currently legal in Kenya.

PSJ 2012). In addition, St John's have a (historical) working relationship with Undugu. They also collaborate with the Chief and the D.O. as well as other government departments such as the Youth Office, and the Children's Office.

#### *Other places, institutions, and amenities important to respondents*

During interviews, respondents were asked to indicate which places, institutions, or amenities were of importance to them in their daily life. The results are shown in a map in Figure 8.15. While many respondents verify the importance of St John's, the Mosque, and the Chief, other places stand out as well, notably Gikomba Market and the Social Hall.

In the map, respondents are divided according to socio-economic group. Given that a small number of respondents were asked to contribute to drawing the map, the data is only indicative of group proclivities. But the map is indicative of some interesting tendencies. Although some places are used by only one group, other places are popular across socio-economic groupings. In addition, most respondents circled in places that were within Pumwani, despite given the opportunity to point out other places in the city. The few places indicated outside of Pumwani are largely related to work.

The map gives important information to planners. It is indicative not only of specific places that are of importance to certain groups, it also indicates the variety of important places, institutions, and amenities, and that these can most all be found within the community.

#### **Allotment letters and stability today**

Pumwani's self-sufficiency, and its close proximity to the city centre makes it an attractive area for tenants to settle in, providing a stable market for landlords and landladies. Rooms are not vacant for long. This is hardly surprising in a city that is considered to have overcrowded popular settlements and tenements. The possibility for landlords to make easy money has created a class of elusive, yet well connected slumlords in Nairobi. Their properties are concentrated in tenement areas such as Kayole and Dandora, and in settlements such as Kibera.

In Pumwani, however, a number of landlords and landladies differ markedly from the norm, some being women-based ownerships (often the daughters or granddaughters of prostitutes), many being residents themselves. Many tenant respondents did not make distinctions in terms of social standing or even economic income between themselves and these live-in landlords and landladies. To the respondents they did not belong to different social classes.

Distinctions were however made between live-in landlords and absentee landlords. According to a live-in landlady respondent the absentee landlords did not care about Pumwani, they businesspeople who only cared about money, speculating that their plot in Pumwani would increase in value once a redevelopment scheme was underway. As the situation is today these absentee landlords cannot profit from their plots other than through renting out rooms to tenants. Developments happening in areas surrounding Pumwani suggest that the market value of Pumwani plots would be high if the area was slotted for redevelopment, and the landlords reimbursed for their properties.

Currently, Pumwani has retained its formal, historical building structure. The allotment letters given to the original plot owners in Pumwani have also had a profound influence on this particular development. The unintended positive effects of these allotment letters therefore need to be taken seriously in any attempt at interventions in Pumwani. The allotment letters provide:

- a bar on buying or selling of property in Pumwani. Houses are passed down within the families. This also hinders the local population from accumulating real estate.
- legal documents. Although not being title deeds, they are contractual agreements between the NCC and the landlord or landlady giving them the right to occupy the plot and build on it, thus providing a partial sense of security of tenure despite constant plans for redevelopment of Pumwani.
- landlords and landladies with the opportunity to take in tenants. Rents are partially based on a tenure basis. Long-standing tenants pay less.
- a prohibition of the use of permanent construction materials. Although this is negative in many ways, it is a deterrent for investors that would want to build permanent multi-storeyed rental units.

These factors make it close to impossible for slumlords or Somali investors to establish a foothold in Pumwani. The relative stability of tenant and landlord/landlady relations are true to the areas history adding to the sense of belonging residents feel. In addition to the judicial factors, history and belonging make it even more difficult for outsiders to speculate in the housing market in Pumwani. Still, the fear of outside investors is palpable among tenants. Maybe because most landlord and landlady respondents were interested in selling their house if given the opportunity.

The social stability partially created by the allotment letters has economic and physical ramifications. The Majengo style houses which have disappeared from many other locations in Nairobi still constitute the main building

Figure 8.15 Respondents' uses of Pumwani and surround >

# Responstents' uses of Pumwani and surronds

Figure 8.15

**Pumwani Primary/Secondary Schools**  
 ● Kids attend

**Chief's Camp**  
 ● House ownership issues/Bar license  
 ● House ownership issues/Mpesa license  
 ● Solving problems with tenants  
 ● Bar licensing issues

**Dispensary/Clinic**  
 ● Buys condoms, gets free check up  
 ● Buys medicine  
 ● Buys medicine

**Gikomba Market**  
 ● Owns a Mitumba clothing stall  
 ● Buys clothes  
 ● Taxi clients  
 ● Does trade  
 ● Does shopping  
 ● Casual labour  
 ● Buys clothes

**Gikomba Market**  
 ● Buys fish  
 ● Taxi clients  
 ● Does shopping  
 ● Casual labour  
 ● Buys vegetables and other food  
 ● Buys food

**Riyadha Mosque**  
 ● Attends/supervises Mosque outreach program

**Pumwani Maternity Hospital**  
 ● Takes kids if ill

**St John's Community Centre**  
 ● Sponsorship once in a while  
 ● Clients for taxi  
 ● Conducts life skills training  
 ● Is part of self help group

**John's Church (Anglican)**  
 ● Attends and does work  
 ● Attends regularly  
 ● Used to attend

**Pumwani Social Hall**  
 ● Landlords' Association meetings  
 ● Landlords' Association meetings  
 ● Training/seminars for protection  
 ● Arranges forums/workshops  
 ● Rents tent for Muslim Wazees  
 ● Meetings for bar/club owners

**Mpesa shop**  
 ● Owns shop/rental units

**Mosque**  
 ● Attends "because they are not Al Shabab"

**Bar**  
 ● Owns bar and rental units

**Bar**  
 ● Owns bar and rents rooms

**Biafra**  
 ● Mitumba clients

**Kamakunji Youth Congress**  
 ● Functions as 'Social Media Steward'

**Sports grounds**  
 ● Takes children for soccer practice

**Woodcarvers (used to be a forest)**  
 ● Used to play here as a kid  
 ● Wood chips for brewing

**St Joseph's Church (Catholic)**  
 ● Attends regularly  
 ● Attends

**Burma Market**  
 ● Trades in Mitumba clothing

**Kaloleni**  
 ● Buys raw materials

**Garissa Lodge (Eastleigh)**  
 ● Does trade

**Eastleigh Section III**  
 ● Civil Society Assistant Coordinator

SCALE 1:8000

100 Metre 50 0 100 200 300

This map 2013, based on original (c) Government of Kenya, 2005 Aerial photography, Photogrammetric work, Field identification, JICA 2003 Spheroid: Clarke 1880 (Modified)

KEY

— Main road	▣ Permanent building	● Prostitutes
— Subsidiary/dirt road	▣ Semi-Permanent building	● Businessmen landlords
— Footpath	▣ Temporary building	● Landlords w/out business interests
- - - Hedges, walls, fences	▣ River	● Small-scale entrepreneurs
— Bridge	▣ Shrub	● Intellectuals, white collar workers
— Footbridge	▣ Slope	● Jua kali tenants, unemployed
		● Beer brewers

type in Pumwani today. By comparing photographs from Pumwani from the 1960s with photographs from neighbouring Eastleigh in the 1950s there are distinct similarities in type and size of housing. Today however, there are large architectural and spatial differences between the two areas. Eastleigh has developed into a multi-storey shopping and housing district. Pumwani has, apart from the congestion of extensions, retained most of its architectural history (Figure 8.16). The alterations in Eastleigh are not only physical and spatial. Nairobi Indians reminisce over the sense of community that existed in the area (see also map in Figure 7.5). Comparing images such as in Figure 8.16 opens up to discussions about the possible ramifications of letting Pumwani onto the open market. Many tenants are afraid of the possible consequences – but Eastleigh and Pumwani are very different neighbourhoods – also historically. Eastleigh has been a part of the commercial market since its inception. It is an open question whether Pumwani will move in the same direction as Eastleigh or not. The juxtaposition of images may help cater for a more nuanced discussion regarding the stability afforded by allotment letters, possible changes, and future uncertainties.

Other research in other settlements in Nairobi show that residents are keenly aware that their impermanent status can actually be beneficial to maintaining a status quo (Robbins 2013).

It can be speculated that the partial security of tenure afforded by allotment letters has provided a better housing stock than elsewhere. In this sense Pumwani, with its live-in landlords, varies dramatically from most popular settlements in Nairobi.

**Uncertainty of housing stock today**

Pumwani has a long history of uncertainty with regards to its housing stock. A variety of plans for demolishing the old structures and building new projects have circulated since the late 1920s. A few, such as the Farnworth Report (1964) and the Mbogua Report (1965) have been reviewed in Chapter Two. Change occurred as a result, with the establishment of the California Housing Scheme in 1969. “*Twilight of an East African Settlement*” writes McVicar the same year, indicating that the old Majengo area in Pumwani would disappear, replaced by redevelopments. McVicar’s thesis can be read as a lament, an obituary mourning the passing of an important community. The construction of California only affected parts of Majengo however. Three years later, in 1972, Bujra writes of class difference in Pumwani, and how the California scheme exacerbated rather than alleviated social difference in

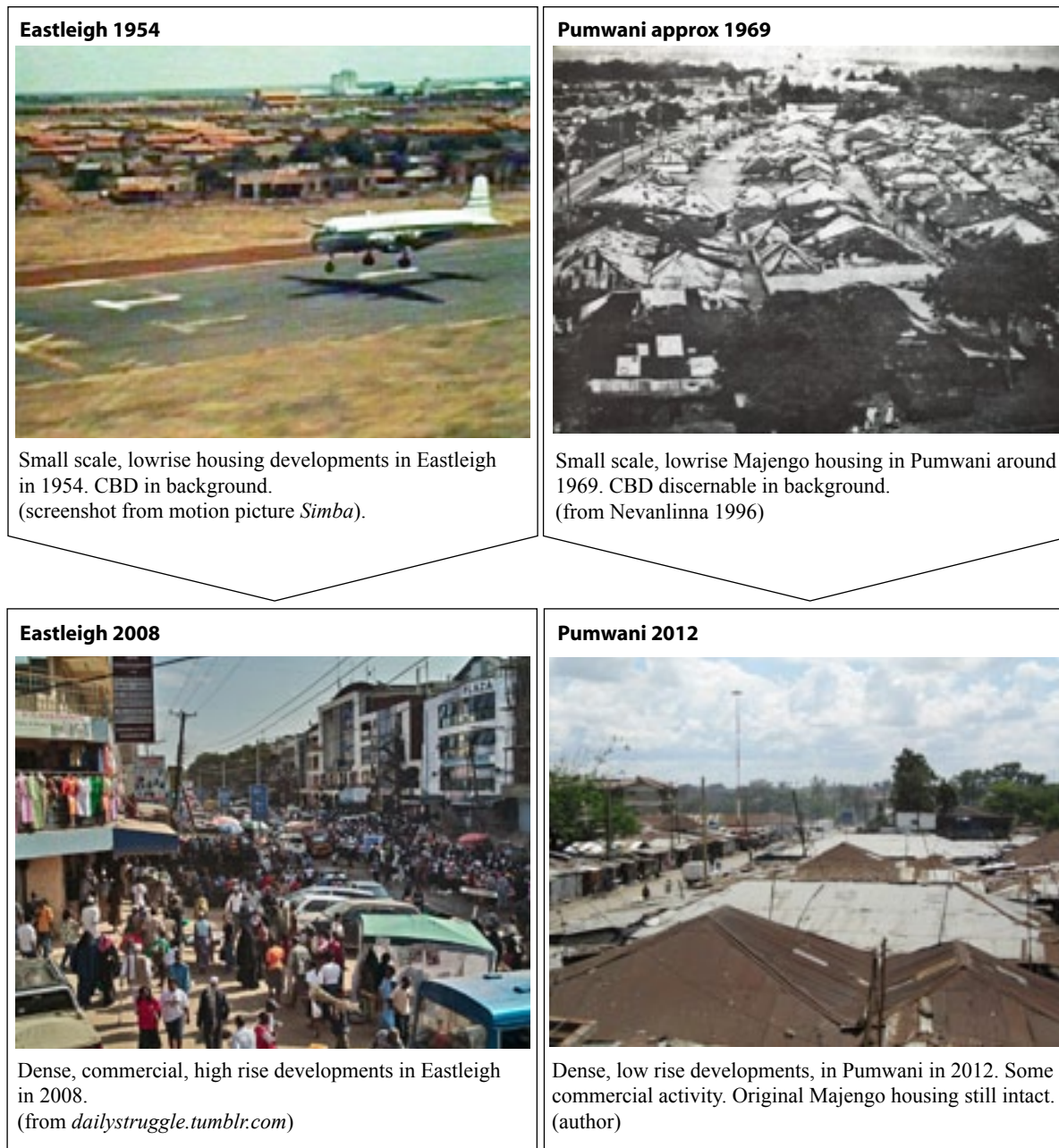


Figure 8.16 Comparing developments in Pumwani with Eastleigh. Buildings were of a similar type up until Independence. Today, there are noticeable differences between the areas.

Pumwani. Most of Pumwani remained as it had been, and with the exception of extensions and the building of the Highrise scheme, there has been relatively little construction activity.

Recently however, the threat to the housing situation has resurfaced due to private Somali investors speculating in real estate in the border areas of Pumwani in Eastleigh and Calfonya, and inside Pumwani in Highrise. These are permanent housing estates where landlords are free to buy and sell properties. In Pumwani ‘proper’, the situation is different. Due to the fact that Pumwani landlords do not own the land upon which their structures stand, and because the houses are barred from sale by law, Pumwani is protected from outside investors buying into the area. Tenant respondents did not seem confident that this distinction would protect them, perhaps for three reasons; although rare, sale of housing in Pumwani is said to occur despite the legal status of the structures (in practice some properties are ‘fenced’ through the NCC to new owners, but on a very small scale); also, Somali businessmen are rumoured to have influential contacts, and it is therefore believed that they can acquire the correct permits through corruption, and; the prices of sold objects are rumoured to be very high – more than four times the market value (whatever the market value of a non-sellable house is considered to be), making it very hard for landlords to refuse any offers made by Somali speculators.

In addition to these factors, rumours as they may be, the fact of the matter is that Somali real estate ownership in Eastleigh is very high and Somalis have bought objects in the parts of Pumwani where buying and selling real estate is legal. The Pumwani respondents all felt that the ‘Somali threat’ was looming and very real. The historical maps in Figures 7.3 – 7.5 show that Somalis have been an integral part of Eastleigh developments ever since its inception in the 1920s. Still, in view of the ‘Somali threat’ as well as still existing plans for redevelopments by the NCC, several respondents (tenants) in this project reported having bought plots elsewhere in Nairobi, or on the outskirts of the city because of fear of what will happen to the housing situation in Pumwani.

These tenants are hedging their bets, investing in small plots of land and building materials in order to secure the safety of their families’ futures. One respondent, with small children, felt that in addition to the insecurity of outside landlords taking over the two rooms that he was renting, inner-city life “was not good for children” (respondent AYA 2012). Another respondent pointed out that she would have loved to stay in Pumwani if she knew she could secure her future there with regards to the rooms she was renting, because all of her friends lived in Pumwani (respondent JS 2012).

Another issue affecting the uncertainty of the housing stock is the substandard construction of buildings. The standard to which the buildings are constructed comply with official demands: houses in Pumwani are temporary structures, and are to be built with temporary materials. This entails that no houses can be built from masonry or stone or the like. The original structures are composed of mud and wattle. These still stand, and the walls have been covered several times over with paint, chalk, and plaster since their construction in the early 1920s. Current technical maps of Nairobi (Survey of Kenya 2005) clearly indicate that all buildings in Pumwani are temporary, save in Calfonya, Biafra, some Gorofani/Bondeni structures, as well some non-residential buildings.

There were different views of what this meant for Pumwani. To some the standard of housing was a problem. Landlords, for instance, could not increase rent on poorly kept houses. To others, the temporary status of housing made the area less vulnerable to outside real estate speculation. The sub-standard quality of the housing stock was a necessary side effect of achieving temporality.

A third issue providing uncertainty for Pumwani’s current housing stock are the perpetual plans for implementing social housing redevelopment schemes in Pumwani. Historically there has been a great need for such developments in order to negate overcrowding. Both Government and landlords have responded to the need for more housing, making changes to the physical layout of the settlement.

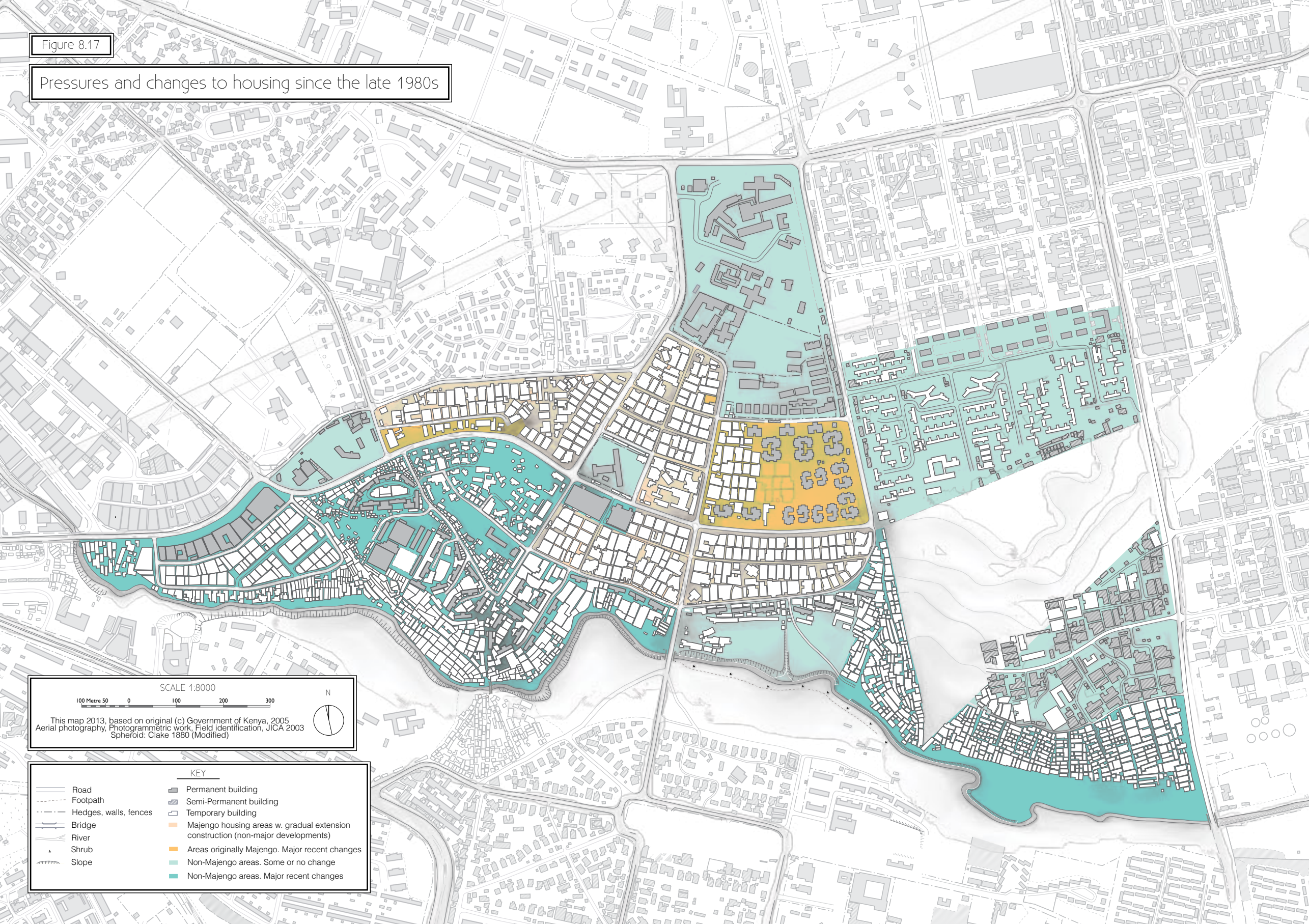
The map in Figure 8.17 examines such pressures on and changes occurring to housing in Pumwani during the last two decades. In the map distinctions are made between Majengo housing (in yellow-orange shades) and non-Majengo housing (in green-blue shades), because of the allotment letter system restricting alterations to Majengo housing. What the map clearly shows are the pressures exercised on the perimeter of the Majengo housing areas, such as those occurring in Gikomba, that is arguably indicative of what could happen if the allotment letter system was abandoned. What the map also reveals is that far from being a static historical housing area, many Majengo houses have been demolished to make way for the Government lead Highrise housing scheme. In addition, business expansions such as in Mashimoni have also been able to carry through major physical alterations. Although the allotment letter system slows down change in the remainder of the Majengo housing areas they have since Independence been covered in extensions.

Figure 8.17 Pressures and changes to housing in Pumwani since the late 1980s. >



Figure 8.17

Pressures and changes to housing since the late 1980s



SCALE 1:8000

100 Metre 50 0 100 200 300

N

This map 2013, based on original (c) Government of Kenya, 2005  
Aerial photography, Photogrammetric work, Field identification, JICA 2003  
Spheroid: Clarke 1880 (Modified)

KEY

- |                       |  |
|-----------------------|--|
| Road                  | Permanent building   |
| Footpath              | Semi-Permanent building  |
| Hedges, walls, fences | Temporary building   |
| Bridge                | Majengo housing areas w. gradual extension construction (non-major developments) |
| River                 | Areas originally Majengo. Major recent changes                                   |
| Shrub                 | Non-Majengo areas. Some or no change   |
| Slope                 | Non-Majengo areas. Major recent changes  |

Overcrowding, and following, the construction of illegal extensions to house the surplus population is a feature common to most popular settlements in Nairobi. This can amongst others be traced back for decades to administrative and political inability to provide enough housing for residents. Harris (2007) does point out that construction of housing was, despite popular belief, a focal point for both NCC as well as the larger corporations in the city (the railroads being the largest provider of housing for workers). The provision was however never enough to meet the rapidly growing work force. With the ‘welfare turn’ in urban policies after the Second World War, housing construction and development schemes were aimed more at catering for whole families rather than just the male worker population. Unfortunately these social housing schemes have often missed their mark of catering for the working class, and have instead served an aspiring middle class (see e.g. Hake 1977 or Bujra 1972). Landlord respondents indicated that they saw few possibilities for building further extensions on their plots, and that the rental market in Pumwani is – in spatial terms – saturated, unless the area is restructured and taller buildings are allowed. Several tenant as well as landlord respondents voiced concern that such a restructuring (i.e. a redevelopment scheme) would more than likely bring about higher rental prices and be the beginning of the unravelling of the sense of community in Pumwani.

Respondent RMC of the Riyadhha Mosque Committee, and respondent TU, an official in COTU, were adamant that redevelopments will occur, and that they would happen in the same vein as Calfonya or Highrise. While respondent TU believed this would benefit residents, respondent RMC was of the opinion that people would have to shift. “People won’t be able to afford rents of 10 000 -12 000,” he explains. But in the end, he would welcome redevelopments: “the economy is changing, and so Pumwani should change. Maybe the young men now are able to get work and help the families within the location?” he asks, but does not seem hopeful.

Landlady respondent LL-D argued that a further development along the lines of Highrise would be good. There sense of community runs strong in Highrise as well, she holds: Majengo and Highrise are one despite the differences in buildings. If she could decide, she’d build “as many stories as possible”.

But private individuals might take over before any redevelopment plans are implemented. She knows of two instances where people have been able to get title deeds, and subsequently sold structures to Somalis (respondent LL-D 2012).

Whether the future of Pumwani is determined by government or private developments, some respondents argued for the rebuilding of houses in

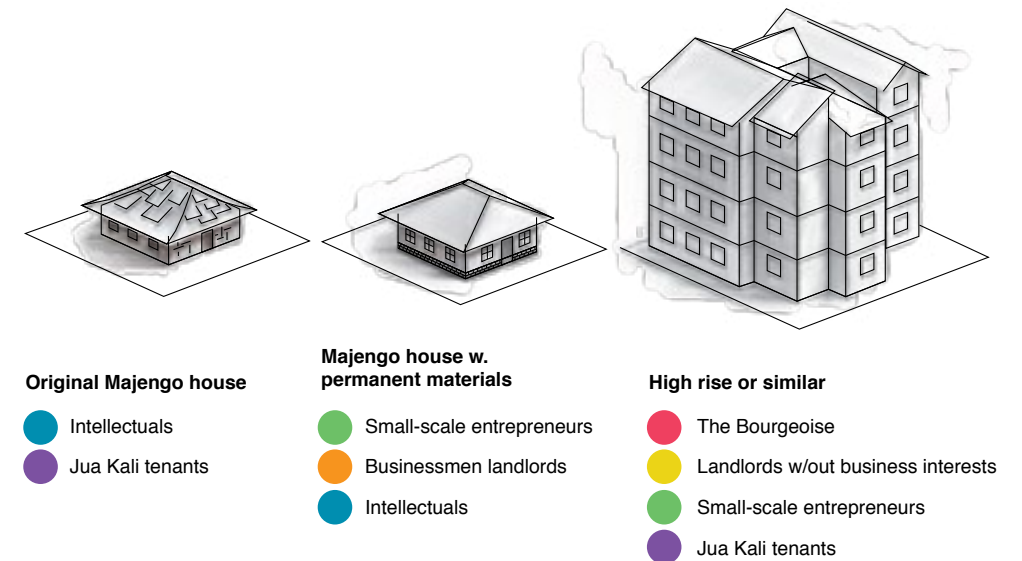


Figure 8.18 Possible future housing types discussed with respondents.

the Majengo style (i.e. in the existing layout or typology), with somewhat higher density allowances and with permanent materials. The respondents were of the opinion that this would keep rental prices at a reasonable level. Still, such alterations would most likely adversely affect the most destitute: one respondent pointed out that her previous rented room was in a building that eventually collapsed. The building was now under reconstruction (to be completed exactly as it used to be), but the rent was none the less going to be higher simply because the building was new and therefore better. This was not a rent the respondent could afford.

Future possible housing developments seem to contrast between private, market driven developments such as those in Eastleigh (see Figure 8.16), and government controlled social housing projects. But within a controlled development residents see different options.

Figure 8.18 attempts to clarify these differences as discussed with respondents. Mainly distinctions were made between three types of future possibilities. One option was to retain the Majengo housing stock as is. Another was to retain the logic of the layout (and architectural style) of the Majengo house, but allowing for the use of permanent materials. The final view was that new housing blocks, such as the Highrise flats, would be preferable.

But who wants the Majengo housing to remain as it is? Who wants to reconstruct the Majengo houses with permanent materials? And who are for redevelopments like those in Highrise? Mapping out such issues become important if interventions in places like Pumwani aim to be egalitarian.

The least popular option was to retain the Majengo housing as is. This view was held by some Jua Kali workers and unemployed respondents for economic reasons, as rent today is cheap as long as nothing is done to the housing stock. Some intellectuals were also partial to retaining the existing housing, not because they did not want to see improvements happen, but because they viewed changes to the physical fabric of Pumwani as a threat to the ujamaa and sense of community.

A more popular view held by some respondents was to upgrade the existing housing stock by using more durable materials, such as concrete foundations and concrete walls, and improving infrastructure, providing ample light and electricity, and plumbing. This ‘middle ground’ was a popular among ‘middle ground’ respondents: businessmen and landlords that believed a shift to Highrise would be a shock to local social and economic structures, thus threatening their precarious income base. Upgrading the Majengo housing was also supported by some intellectuals, who felt that the upgrade was sorely needed, and hoped that the changes would not make the area too expensive for current residents to live in.

The view held by most respondents was that Majengo should be redeveloped similar to Highrise, something that has already occurred to a large extent in the area known as Bash (see Figure 8.17). Respondents favouring this development were of the opinion that those that currently lived in Highrise had a better standard of living. Some respondents were worried about the increase in rents, while others believed that the density of a high-rise development would bring rents down if compared to an upgrade of the existing housing stock. Increases in rent were an incentive for landlords partial to the scheme, who saw developments such as Highrise as an opportunity to make more money. None of the respondents in support of Highrise felt that the sense of community in Pumwani had been negatively affected by the developments (despite this claim being opposed by those in favour of more modest constructions).

Curiously enough, none of the respondents considered the California-style blocks to represent an option. This despite the fact that these blocks from the 1960s display many architectural qualities such as cross ventilation, easy access, good light conditions, and ample green areas not offered by the newer Highrise flats from the 1980s - 2000s.

### Semi-legal trades today

These trades are a blend of illegal and legal activities. I have chosen to focus on prostitution, beer brewing, and miraa trade. Prostitution is illegal, but the form practiced in Pumwani – *Malaya style* – has a long tradition in Pumwani, and is generally accepted (White 1990). The brewing of beer is licensed and legal, but most home brewers will also produce stronger Changaa<sup>11</sup>, which is an unlicensed illegal activity. Miraa is legal in Kenya, but illegal in other countries. With the international connections it is based on, the trade arguably borders on elements of illegality. Moreover, there is an ongoing debate in Kenya on the need to illegalise the substance (Diriye 2013).

These trades have distinct impacts on spatial developments. Figure 8.19 indicates the spread of these trades in relation to thoroughfares and other street and stall trades Pumwani.

The map indicates that activities such as prostitution, brewing, and miraa trade are defining for a number of streets and thoroughfares in Pumwani. The sections reveal that the spatial habits of the trades – the way in which the streetscape is utilised for business – differs between the trades, and has a profound effect on the way the street is perceived.

In the prostitute alleys, the Malaya style of prostitution entails that women will sit outside the doors of their rented rooms and wait for customers. They will not make any active efforts to attract would be clients. The alleys are normally quiet, without much activity. The alleys will be used by customers and non-customers alike. There are few indicators signalling that these alleys are where prostitutes live.

The miraa trade along Lamu Rd presents a different atmosphere. The ‘sidewalk’ is a high activity area, busy with street trade, with stalls and hawkers jostling for position, pressing pedestrians onto the road.

In the internal streets in Digo, where most of the beer brewing takes place, the atmosphere again changes. Here, the smell of malts lies heavy in the air, mixed with plumes of charcoal smoke from the open air mashing taking place outside the bars. Most of the activity in connection to the bars takes place inside the covered up verandas that are a part of the original Majengo houses. Except for the charcoal pits in the street, the beer brewing activity has not encroached on the street, leaving ample space for passers by.

<sup>11</sup> Illegal, naturally carbonated ale with a stronger alcohol percentage.

Figure 8.19 Legal and semi-legal street trades and their effect on the streetscape. >

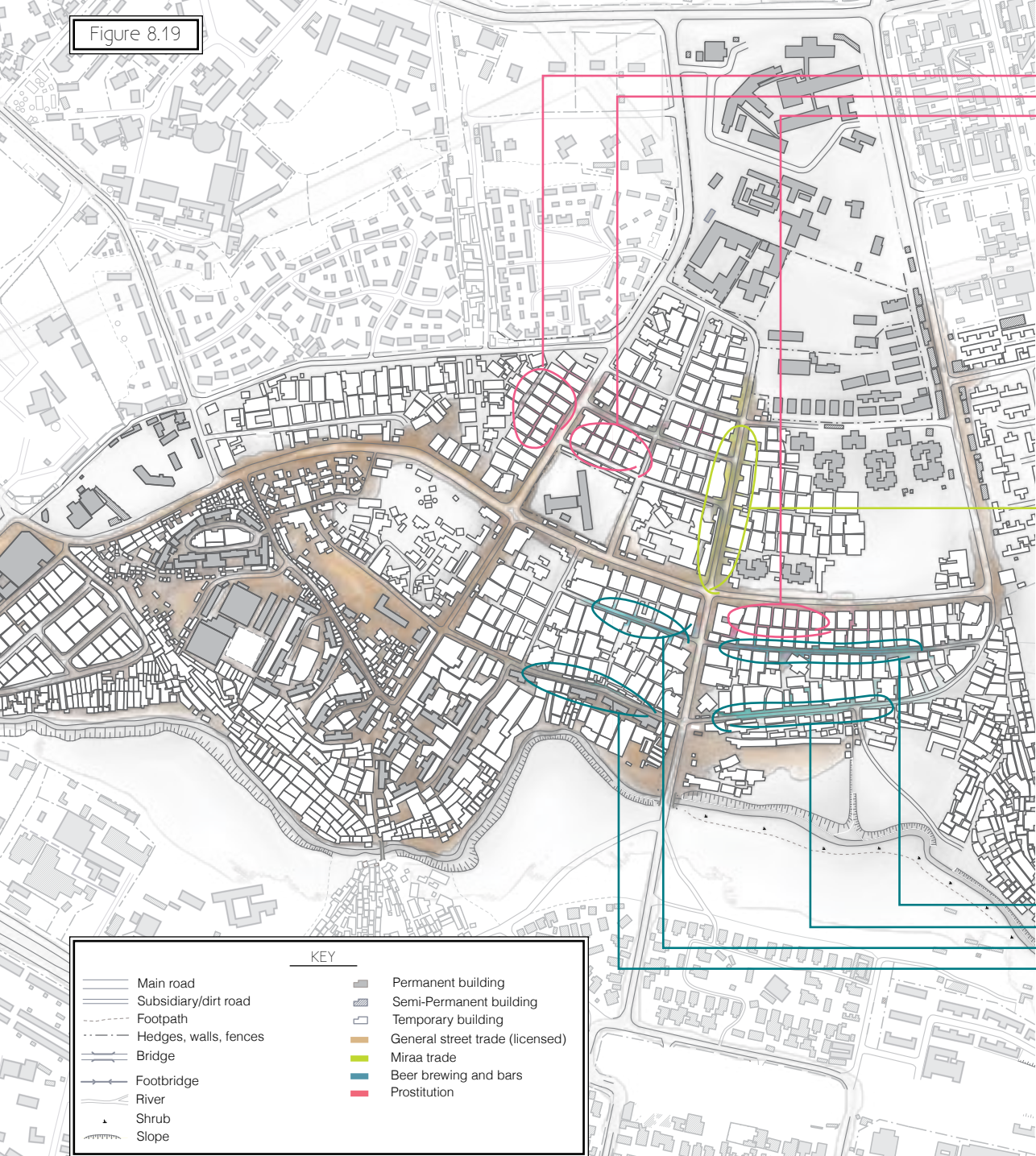
# Spatial practices - legal and illegal street trades

SCALE 1:8000

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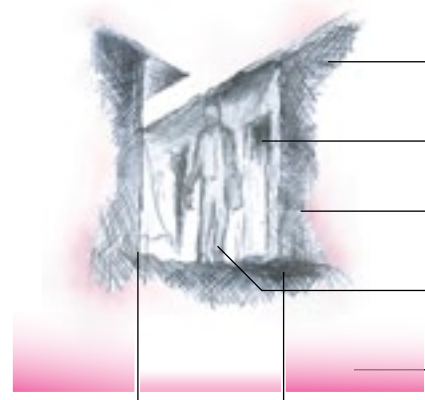
This map 2013, based on original (c) Government of Kenya, 2005  
Aerial photography, Photogrammetric work, Field identification, JICA 2003  
Spheroid: Clarke 1880 (Modified)

Figure 8.19



KEY			
	Main road		Permanent building
	Subsidiary/dirt road		Semi-Permanent building
	Footpath		Temporary building
	Hedges, walls, fences		General street trade (licensed)
	Bridge		Miraa trade
	Footbridge		Beer brewing and bars
	River		Prostitution
	Shrub		
	Slope		

Activities inside ← → Activities inside



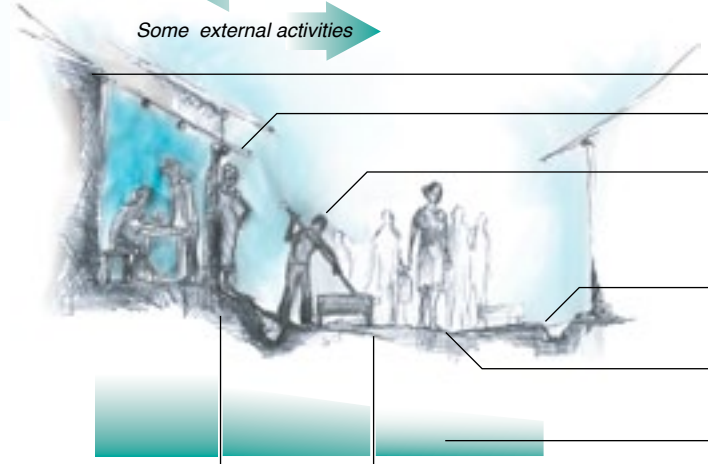
- Extensions built on both sides of alley
- Open/closed door indicating availability
- Extensions rented by prostitutes at higher price
- Alleyway used by clients, but also by non-clients as a thoroughfare
- Levels of intensity of use

Pressure from street trade → ← Pressure from passing traffic



- Original Majengo House
- Traffic
- Stalls built as extensions onto 'pedestrian area'
- Hawkers push pedestrians into street
- Miraa sold along street
- Main road
- Levels of intensity of use

← Activities mostly inside  
→ Some external activities



- Majengo House
- Covered area for bar (original porch)
- Beer brewing in street
- Drainage
- Dirt road (w occasional car)
- Levels of intensity of use

### Commercial interests and stability today

The temporary status of the housing stock in Pumwani and the lack of possibilities of building with permanent materials has no doubt contributed to the lack of investments in Pumwani by Nairobi's business community. Pumwani's placement close to the city centre, the proximity to Gikomba market, and the number of people living in or around the area are all factors that make Pumwani a suitable place for business. There is a lot of street and stall based business activity along the main thoroughfares in Pumwani, but it consists mostly of small-scale, local businesses (some with international connections, like the miraa trade). In Eastleigh though, just across the road from Pumwani, business activities (and shop fronts) are of a different scale (Figure 8.16). A few exceptions to temporary, stall-based activities can be noted in Pumwani; in Mashimoni, along Digo Road, permanent, two-storied shops and businesses are coming up. According to the owners themselves none of the structures have been granted title deeds, but they "are in the processes of obtaining title deeds based on the allotment letters" (respondent UR 2012); the multi-storey Mumbai shopping complex sits on a plot belonging to the Mosque on the corner of Meru and Digo Roads, although the complex is virtually empty since the rent is much higher than elsewhere in Pumwani; a few single-storey shop fronts have also emerged to the East of the Mosque; a single, two-storied building with shops has newly been erected along Lamu Road in Sofia (see Figure 8.2).

Despite the lack of major investments, Pumwani does not exist in a vacuum. Together with political decisions, and socio-cultural relations such as those defined by family and kinship, commercial interests have been instrumental in defining Pumwani internally - as well as defining how Pumwani relates to the city, region and other countries. Many of these commercial interests are connected to Gikomba Market. Gikomba is widely held by many Nairobians to be the biggest market in East Africa. Although Gikomba is considered to be an entity on its own, its close proximity and historical links to Pumwani makes it natural to include it in any analysis of Pumwani. Respondents claim that all traders in Gikomba were licensed. There is however ample evidence to suggest that historically this has not been the case, and that there has existed a systematic clamping down upon petty business in Pumwani/Gikomba - illegal or not - by the police, in collusion with larger businesses and shop owners. Robertson (2007) sees this as a class-based feud between small-scale businesses within Pumwani and larger scale businesses from outside Pumwani - but with interests in Pumwani. There is clear evidence that this unrest (evident from the 1950s until the early 2000s) solidified feelings of unity among petty traders in Pumwani/Gikomba. Respondents in Gikomba indicate that this animosity has shifted, giving way to a more

cordial and mutually beneficial climate between Gikomba traders and other businessmen. It can be speculated that this shift occurred after tensions rose to a level where all forms of businesses suffered from loss of customers.

Respondents did not discern noticeably between business people that are company owners with employees and waged workers as long as they hold low-paying jobs. This lack of distinction needs to be seen in relation to the relative low wages in casual employment in Kenya, and the relative ease with which people can employ workers on a non-permanent basis. Many respondents had moved in and out of being small-scale employers, and did not consider such movements as class-based. Distinctions therefore need to be made within the business, trader, and entrepreneur group as to size of business, levels of employment etc. It is possible to differentiate between linkages to Gikomba on four different levels; the local connections to Pumwani; the citywide connections to the rest of Nairobi; the multiple connections between Gikomba and the rest of the country; and a regional (and even global) scale showing the truly international character of the market.

In terms of local connections to Pumwani, many respondents felt that they had no need of going outside of Pumwani to shop because Gikomba is "a market for everything" (as indicated in Figure 8.15). Judging from a brief comparison of prices, Pumwani residents will get the cheapest rates in Gikomba. As such the placement of the market - partially in Pumwani - has proven valuable for residents. Still, one could speculate that the close proximity between an all encompassing market and a residential neighbourhood means that there is possibly less interaction between Pumwani and the rest of the city. In negative terms this would mean that Pumwani is 'cut off' from the rest of the city. In positive terms this could mean that this sense of self-dependency adds to the already strong sense of community and cohesion within Pumwani.

According to respondents, Gikomba does not provide a lot of jobs for local residents. According to trader respondents people working in Gikomba are for the most part from elsewhere in Nairobi, with a few international labourers - particularly from Tanzania. The make up of workers and traders in Gikomba reflect the size and reach of the market. Rather than being a local market within Nairobi it serves the entire region. At a city level, respondents claimed that most vegetables and foodstuffs produced upcountry will pass through Gikomba. Nairobi's Kinyago/carpentry industry is based in Gikomba/Pumwani, and the Mitumba clothing industry has its regional base in Gikomba. It is perhaps through the Mitumba industry that the strongest bonds exist between Pumwani and the city and Pumwani and the East Africa region. The exhibitions (small stores) in down town Nairobi are, according to respondents, supplied from Gikomba. Although private individuals can

come shopping in Gikomba, most of the goods are bought up by middlemen for redistribution around the city. Again, the reputation of Pumwani and Gikomba hinder the upper classes from entering the area. More importantly, this negative view of Pumwani from the outside also influences people's choice of where to go to shop. Although the situations vary, few businessmen in Pumwani (if the business is based in Pumwani) seem to have customers coming from outside the community. Woodcarver respondents informed that they rarely sell to outsiders. The bulk of their produce is sold through a co-operative located within the woodcarving compound in Pumwani close to the bridge to Shauri Moyo. The buyers are by and large shops from the various Nairobi malls. Although the co-op sells to private individuals at a fraction of the prices at the mall shops or markets, very few customers come from outside Pumwani. A taxi driver interviewed responded that his client base was solely Pumwani based, and indicated that people in Nairobi generally would not trust Pumwanians in a business relationship. A Mitumba clothing trader respondent, however, had built a large network of business relations elsewhere in Nairobi. He also runs a private company that makes house calls to sew curtains for well-off clients. Being based in Gikomba, perhaps a more 'neutral' location compared to Pumwani, the respondent could choose which location to inform the client that he came from. This respondent, as well as a landlord respondent indicated that they often were open about coming from Pumwani, because it gave you 'street cred', something that certain business relations cherished and trusted. Nonetheless, the Gikomba respondents all indicated that people from outside of Pumwani, especially the moneyed classes, were hesitant to enter Gikomba (and certainly Pumwani), and would often send their maids to run errands on their behalf.

On a national level the Mitumba industry is also important with some complex trading structures between the port of Mombasa and Nairobi (and Dar es Salaam). But it seems that the vegetable and foodstuffs production is what is the most important on the Gikomba-Kenya level. There is a long history of rural traders coming to Nairobi to sell their produce (see e.g. Robertson 1998). This is still evident today in Gikomba.

The regional Mitumba trade that goes through Gikomba or is conducted with the market as a base seems quite extensive. Respondents referred to complex trade routes between countries – especially Tanzania, the port as well as Kariakoo Market in Dar es Salaam and the border town of Moshi. Mitumba clothing comes in large bales from Europe and the US, mainly through the ports in Mombasa and Dar es Salaam. Although goods are cheaper in Tanzania, not all types of clothes are taken through the port in Dar. Some specialty clothes only come through Mombasa – thus creating a niche market in Tanzania that the Kenyan and Tanzanian traders exploit in a two-way transaction. Cheaper clothes are bought from Dar es Salaam, some are

sold in Tanzania, and the rest are repacked in Moshi before being transported to Gikomba and distributed through sales channels there. The remainder of specialty clothing which is brought to Gikomba from Mombasa is brought the other way and end up in stalls in Kariakoo market in Dar es Salaam. As a result there is a rather large group of transitory Tanzanian traders that make a living off of travelling back and forth between Tanzania and Kenya. Many of them live in Pangani, and indicated that a normal stay in Nairobi could last up to 2 months.

Apart from Gikomba there are also other business-related groups in Pumwani that are influential, especially within the Muslim community. Many prominent businessmen in Pumwani are Muslim, as was the case historically. The Muslim Riyadhha Mosque committee is currently constructing a very large mosque and madras in Pumwani on the grounds where the old mosque was. The money for this project is rumoured to be connected to fraudulent activity in a ministry – implicating a Member of Parliament. What all respondents agreed on was that there was no link between the Kenyan Muslim construction projects and the Somali real estate speculators. But many respondents (including some Muslim respondents) considered both parties to be corrupt.

The relationship of the respondents to the Chief and overarching administrative structures depended on the position and vocation of the respondent. Respondents with businesses had the most regular contact with authorities, but not on a daily basis. Contact was most regularly made with relation to common and normal administrative issues (such as payment of licences etc.), but respondents also contacted administrative authorities to attempt to iron out any issues or problems that would arise in relation to business. This would seem to be most common in landlord-tenant disputes, where the chief elders often function as mediators. Respondents indicated that bribes were a common way to settle issues, either by paying city council authorities because of lack of proper permits, or paying chief elders in connection with issues related to building of extensions etc. This practice is also referred to in several other historical sources, and seems not to have changed significantly over the years.

## CONCLUSIONS

In this chapter I have shown how the proposed mapping method has been useful to uncovering three things; socio-economic practices in a settlement that function as important identifying distinctions between social groups; the social differences that exist in a settlement that social groups are based on; and a number of key issues that are important to the settlement, and how social groups relate to these key issues in various ways.

In the mapping I rely on in-depth interviews. The findings are presented through a visualisation: a blend of text, image, diagram, and map suggest that there exist multiple, close links between socio-economic and spatial developments in a settlement. As such, the study of the three topics above; socio-economic practices, social groups, and key issues, are all examples of important topics planners and practitioners need to focus on when seeking to do interventions in popular settlements.

Solely relying on mapping physical environments could provide a detailed depiction of conditions in a settlement, but would arguably not be able to explain the multiple reasons for the state of conditions. On the one hand conditions are structured by external forces, such as a country's economy, poor infrastructure, lack of employment opportunities, and an historical inability to provide ample low cost housing. But the state of conditions are also linked to internal social, economic, cultural, and political developments. By introducing topics such as the ones above, making connections between the non-physical and physical, a tapestry of knowledge is provided establishing a better foundation for suggesting interventions.

These topics studied in this mapping rely heavily on the historical research presented in Chapter Seven. This chapter shows how the method makes it possible to not only describe current issues, but to connect these to historical practices in a community, and provide thorough reasoning for social and spatial developments.

With this the mapping of Pumwani comes to an end. In Part III I provide an afterword where I discuss how such a mapping could possibly be utilised for planners and architects seeking to intervene in a community like Pumwani.

## **PART III**

### **Mapping ahead**

## 9. Final conclusions

In this thesis I have provided a critique of historical and current mapping efforts used in popular settlements in Nairobi. I have subsequently provided an alternative mapping method that synthesises elements from a series of sources in order to better highlight the socio-economic diversity of a settlement and its connections to spatial practices.

I lean on a number of academics engaged in the critique of mapping to establish the basis for my research. MacEachren (2004) expands on the concept of the map, allowing for text-based as well as visual material to be considered as mapping – an important argument in a largely text-based world of NGO and consultancy-based analyses of popular settlements. Wood (1992/2010), Monmonier (1996), Black (2000), and Harvey (1991) are amongst those who open up for a discourse on the social and political implications of mapping, while notably Woodward and Lewis (1998), and Mbodj (2002) place this discourse in relation to historical developments in Africa.

To further contextualise these lines of arguments, I lean on researchers specifically engaged with African urban developments, both historical and current. Throughout the thesis I attempt to make connections between the overarching discourse on mapping, and the contextually based studies on African urbanization. Authors central to examining the broad trajectories of African urbanity; and explaining these trajectories in light of urban theory are Simone (2004) and Pieterse (2008). Those central to examining specific themes of urban developments in Nairobi are notably White (1990), researching prostitution, Robertson researching trade (1998), Lewis (2000) researching welfare, and Bujra (1972) researching class formation.

Other notable academic contributions to the discourse on urbanisation and popular settlement formation in Nairobi, that have bearing on this thesis, are made by Harris (2007) on Government housing policies, Anderson (2006) on the Kikuyu and Independence, Anyamba (2008) on the range of informality – making important distinctions between informality and poverty, Stren (1994) on the changing tendencies in aid policies, Nevanlinna (1996) on historical



physical developments in Nairobi, and Ochieng (1995) on issues of politics and state formation since Independence.

This broad range of sources on African urban developments – both of a theoretical nature and thematic focus – help establish a framework within which two parallel histories are allowed to develop in this thesis: the history of mapping popular settlements in Nairobi, and the history of Pumwani.

### **A history of mapping efforts**

The thesis can be said to make three distinct contributions. Firstly, the examination of historical mapping efforts in popular settlements in Nairobi (covered in Chapters Two through Four) is in itself a unique research. Based on the aforementioned highlighting of key social and political challenges of mapping, the chapters show how the intent, execution, and analysis in mapping efforts in popular settlements are closely related to the policies and zeitgeist of historical and current periods.

For the purpose of this thesis the history of mapping in popular settlements in Nairobi has been carried out in order to understand the changing proclivities and relations between politics and mapping from the 1910s onwards. By utilising Harley's three contexts of maps (2001, 35-46) I analyse a number of mapping efforts based on the context of the mapper, the context of society, and the context of other maps. I thus divide the Nairobi mapping efforts and associated policies into five periods. These are:

1) A period from the 1910s up to 1939 marked by a *lassies faire* policy from Government regarding African urban developments, largely because the African workforce was seen as migratory and nominally belonging to rural reserves. Mapping efforts in the period followed suit. Carried out by high standing administrators it was foremost observatory, with a focus on issues such as health and security. Notably in the period the Simpson report of 1913 was used to formalise geographic divisions between European, Asian, and African areas of the city based on health concerns.

2) The period from 1939 to 1963 is distinguishable by its political welfare turn based on the need for permanent African labour in Nairobi, and following, a focus on describing lacking amenities through mapping that could provide the basis for social housing projects. Lewis (2000) and Harris (2007) both describe this turn in policies – its reasons and its effects – in detail. The following primary sources are examples of mapping efforts underpinning policies in the period: Ogilvie (1946) makes early use of visual material to argue for the construction of new housing areas for the African workforce; Parker (1948) is an example of early attempts at academic

mapping, though clearly entrenched in world views of her time, and; Vasey (1953) uses comparative case examples from South Africa to argue for allowing African lead private property ownership and renting to alleviate the pressures on Government by an increasingly larger and increasingly dissatisfied African urban population.

3) The period from 1963 to the late 1970s is distinguishable by its future optimism, increasing academic focus in mapping, and catering for residents' viewpoints through mapping. After the declaration of Emergency by the colonial Government and the subsequent independence, there was newfound political incentive to redevelop the 'eyesores' of colonial urban planning such as Pumwani. This incentive instructed mapping efforts to be carried out, notably by Farnworth (1964), and Mbogua (1965). The recommendations of these reports were used to initiate the California redevelopment scheme. The scheme ultimately exacerbated internal socio-economic differences between residents as described by Hake (1977) and others.

Academic contributions of note are Etherton's study of 'uncontrolled' housing in Mathare Valley (1971). Etherton proves through juxtaposition of text and visual material in the form of aerial photography and maps that are made diagrammatic, that though building construction may not be controlled by Government or Nairobi City Council, it is developed in a spatially coordinated manner by residents' associations.

Bujra (1972), who I lean heavily on in Part II of this thesis, is another important academic mapping contribution in the period. By way of detailed historical investigation of socio-economic and cultural diversities, she describes the development of propertied and non-propertied classes in Pumwani. By extension she makes clear that popular settlements are diverse and multiple rather than homogenously poor.

4) The period from the late 1970s to early 1990s was characterised by a downturn in mapping production, and a macro-oriented focus on urban developments in keeping with the structural adjustment policies of the period. Among researchers who address the period are Stren (1994), who argues that academic research on urban issues experienced economic cut backs as a result of changing policies focused on overarching macro-economic research. Still, academic and consultancy based mappings, reports, and research was produced, albeit perhaps at a lower rate than in the previous period.

5) The period from the early 1990s to present is marked by a return to the micro-oriented 'humanism' of the 1960s and 1970s. It paved the way for participatory mapping efforts that not only catered for the inclusion of local voices in mapping, but instructed residents to carry out the mapping themselves. This final period has ushered in a discourse on methods and

tools for participatory mapping, as outside experts from academia, NGOs, or consultancies are increasingly becoming facilitators and teachers of mapping rather than being practitioners.

This discourse can be seen to be dominated by the Sustainable Livelihoods Approach (SLA) that in turn has numerous iterations. Authors contributing to this discourse are often both researchers and practitioners such as Rakodi (2002), Beal (2002), Carney (2008), Moser (2009), and Hamdi (2012). I make distinctions between three types of participatory mapping practices that all relate to SLA. These are *the extreme*, where participatory respondents are the only source of information, and ‘expert’ knowledge is seen as unhelpful; *the check box exercise*, where a number of tools and mapping methods are utilised in popular settlements, without much regard to context and/or purpose of the project; and *the holistic* where attempts are made to use tools and methods that are seen to best correspond to the context of the settlement and the nature of the intended project.

It is in this final period that digital mapping efforts have come to make a significant mark on the mapping of popular settlements. One important strand of digital mapping couples with the growth of social media and participatory mapping into powerful and successful platforms that I dub social media based mapping platforms. These are still under rapid development. Leaning on the initial discourse on mapping covered by Wood, MacEachren, Black, and others, I attempt to show that there are a number of issues that need to be examined more closely with regards to participatory mapping in both digital and non-digital forms. These issues relate to technical matters such as collection, interpretation, and visualisation of data, as well as social issues pertaining to how egalitarian participatory mapping efforts truly are. These issues are significant to discuss in relation to popular settlements which do not necessarily develop in line with the ‘city proper’, and where residents are often marginalised. I argue that because such issues are fundamental to the nature of mapping, they cannot be over-won through digital advances, but need to be dealt with through their ‘analogue’ baselines.

As it is not an exclusive interest in this thesis to research historical mapping efforts in popular settlements in Nairobi, there seems to be ample room for further research that devotes itself fully to this topic. Notably, an exhaustive data collection on sources of early mapping efforts might yield important insight into the development of urban form in Nairobi.

On a passing note, Mrs Nevanlinna suggested that I in this thesis issue a word of warning to the custodians of these original sources that are becoming increasingly difficult to obtain for research purposes because they are not taken care of. This is indeed worrisome for the future academic discourse

of a city of such importance as Nairobi, where clearly, a number of issues pertaining to its historical development are yet to be researched.

Also, more research on the effects of more recent SLA-inspired mapping efforts and on-going digital mapping efforts could provide other points of views than those highlighted in this thesis.

### **A history of Pumwani**

The second unique contribution in this thesis is the history of Pumwani described in Chapter Seven. I here rely on a number of primary and secondary sources in describing the growth of one of Nairobi’s most important housing areas. The history highlights the historical and current socio-economic diversity of the settlement arguing that popular settlements cannot be limited to being described as only poor areas.

I argue this by dividing between four distinct periods in Pumwani’s history, relying on research conducted by academics such as Parker (1948), McVicar (1969), Bujra (1972), Hake (1977), Spencer (1985), and White (1990). But also utilising primary sources such as Thornton-White et al. (1948), Mbogua (1965), and a number of open-ended, qualitative interviews with residents. The four periods are:

- 1) Early years from 1899 to 1922, predating the establishment of Pumwani, but establishing a number of important prerequisites for understanding the formation of the settlement, notably the import of Muslims and Swahili culture from the coast.
- 2) The rise of Pumwani from 1922 to 1939, describing the establishment of the settlement and the early propertied classes that rented rooms to remaining population. With the establishment of Pumwani, and the influence of early Muslim house owners and businessmen, Swahili culture dominated. Through language, clothes, and customs Swahili became a common expression for cohesion in the area. This connected the otherwise varied socio-economic and cultural peoples that came to reside in Pumwani.
- 3) Resistance and power struggles from 1939 to 1963, concerning itself with the growth of political consciousness among residents, the effects of the Emergency on the settlement, and the continuous need for (economic) stability lobbied by business owners, landlords, landladies, Muslim groups, and a growing population of educated Christian residents.
- 4) Redevelopment schemes and aid from 1963 to present, describing the largely detrimental effects of the redevelopment schemes that exacerbated socio-economic differences in Pumwani, and opened for property investment from outsiders into the new housing developments.

But in this period we can also observe the (largely unintended) positive effects of the allotment letter system – initiated in the 1920s – that disallowed house owners to buy or sell their properties on the open market. This has resulted in a settlement where property has been passed down to kin, establishing several generations of cohesion between landlords, landladies, and their tenants. Pumwani identity and sense of *ujamaa* (brotherhood) remains strong and is embodied in the still standing *Majengo* houses erected in the 1920s.

During the last decades new power constellations have come to influence developments in Pumwani, where the Christian community centre St John's along with a number of youth oriented CBOs, share dominance with the Muslim Riyadhha Mosque Committee, and the Chief's Camp and its Elders.

The purpose of writing Pumwani's history is to establish a number of historical issues and social groups as a starting point for further mapping exercises described in Part II of the thesis. As such, I have limited the space allocated to the historical chapter. I believe that further research that devotes itself exclusively to the history of Pumwani would be a welcome addition to the written history of Nairobi. The settlement and its history incorporate a great number of the important cultural, social, and political issues that have come to form Nairobi. As such, studying the formation of the city through Pumwani would arguably enrich urban and historical discourse.

### **A mapping method**

The third contribution this thesis provides is a suggestion for a mapping method developed based on data collection, interviews, and research in Pumwani between 2009 and 2012.

Through the aforementioned critique of mapping efforts in Nairobi I show that although the current development and mapping paradigm in which we are entrenched celebrates the ingenuity and strength of urban poor communities, mapping efforts fail – save a few notable exceptions – to uncover the multiplicity and diversity of popular settlements.

The mapping methods presented in this thesis addresses this concern by connecting a settlement's history, present, and future. This allows us not only to build an in depth understanding of why a settlement functions in the way that it does, but also makes clear the multiple connections between social and physical developments – developments that cannot be seen as unrelated to one another.

In order to make such connections the suggested methods not only span back and forth in time. They also vary in scale. The mapping methods

presented in this thesis ultimately provide the ability to connect large-scale issues to human scale problems. The methods provide an effective way of zooming in and out between the micro and the macro. As such the suggested methods connect with SLA intentions of multiple foci on communities and interventions, foci that intend for decisions to be effectively made at administrative as well as grassroots levels. For this I lean on research carried out by Moser (2009) whose longitudinal study of a popular settlement in Ecuador showcases how SLA-inspired methods can be both contextual and analytical.

Other distinctions are provided by way of the mapping methods: distinctions between social groups in settlements that to the outside often are rendered as homogeneously poor. For this I rely on Bujra (1972), who shows how historical research can enable mappers to uncover social distinctions in a community. These social distinctions highlight important concerns: that interventions in a community may work well for some groups, but might possibly be detrimental to others. As such the mapping methods are helpful in forcing mappers to not only further distinguish between social groups when suggesting interventions, but also to be honest about making difficult decisions such as *for whom* interventions in a settlement are meant to be beneficial.

A total of thirteen historical socio-economic groups and eight important historical issues are uncovered in Chapter Seven and form the basis for the further mapping of Pumwani in Chapter Eight. Of the thirteen historical groups, six are found to still exist that are of importance to the community. Of eight historically important issues, seven are still defining form the area, with certain modifications to the focus of the topics. The process of mapping these categories is done through an incremental, iterative process involving desk research, on-site observations, and interviews, described in depth in Chapter Eight.

Although I have intentionally opted away from introducing digital mapping in my rendition of a mapping method, I would at this juncture, at the very end of this mapping exercise, welcome further investigations into digital mapping efforts that could build on the method constructed in this thesis.

In closing I have provided an afterword to this thesis that shows how the mapping method can be utilised for architects and planners through *scenario planning*. On the basis of the discrete categories presented in this thesis - and the connectivity established between past and present - future issues and their effect on the various socio-economic groups can be addressed. I do this in order to equip planners with a method that allows for better forecasting and evaluation of possible consequences of implementing interventions.

## Afterword: mapping possible futures

In order to make practical the mapping method described in Part II for planners and architects, I suggest we turn towards the future. By connecting historical developments to current conditions, various timelines are created that can be cast into the future. This is not an exact science, but looking into future scenarios can be one way of expanding on the mapping in Part II for two reasons: 1) Interventions by architects and planners are not only created to address current issues. If they are to be robust over time, interventions arguably need to be created with some possible futures in mind. 2) The method described in this afterword provides suggestions for how to effectively utilise the large amounts of information gathered through mapping historical and current developments. By a narrowing down of the data, a platform is provided for planners and practitioners, together with local residents and other interest groups, from which discussions of strategies and interventions in settlements can unfold.

### CONSTRUCTING SCENARIOS

Up until this point, the mapping method has in many ways concentrated on problematizing issues. I have done this by asking questions, conducting interviews, doing historical studies, and visual observations in the settlement, and collecting and analysing data. I will now turn from problematizing to operationalizing: cutting down the wealth of information that the mapping has produced to a few to major developments in order to frame the basis for creating proposed and possibly institutionalise strategies and planning interventions.

I argue that in order to best make strategies and plan interventions – implemented to best secure the future of a settlement – it is important that we make predictions about some of the things this future might bring, even things that might be beyond the control of the planner, such as major changes of government, or monetary inflation.

To do this I will be using elements from *Foresight* to operationalize the mapping efforts carried out in Chapters Seven and Eight. Foresight is a collective term given “the range of methods and techniques used to develop knowledge about the future and create dialog regarding challenges and future choices” (Dietz 2003)<sup>1</sup>. I will specifically be using *scenario planning*, which involves constructing a series of scenarios that are all possible iterations of future events. On the basis of these scenarios I will discuss what kinds of strategies and interventions would be most useful to the settlement, and how groups would benefit differently from different strategies and interventions.

I do not believe scenario planning provides definitive answers to the challenges that Pumwani faces. Scenarios lay out a number of suggestions as to the key challenges the community faces – and might face in the future. Scenario planning may provide a clear starting point for discussing these challenges and how to possibly address them through strategies and interventions. The method presented in this afterword together with the mapping of historical events in Chapter Seven, and the mapping of current issues in Chapter Eight, provides useful approaches to mapping and suggesting interventions in popular settlements.

### Possibilities afforded by scenario planning

Historically, scenario planning is not often utilised as a planning tool by architects and planners. In most cases it has been an alternative way for corporations and organisations to plan ahead and create corporate strategies for tackling an array of possible futures. One of the most referenced examples of scenario planning was that used by Shell to cope with the oil crisis of 1973 when the Arab members of OPEC announced an oil embargo (Kahane 2012, loc. 188). Shell before the embargo had already simulated a number of possible scenario exercises, enabling them to quickly implement changes to their corporate strategy once the crisis hit. As a result, Shell was less affected by the oil crisis than some of the other international oil companies at the time (Van Zanden et al. 2007; Yeh & Yeh 2004). Another well known example of scenario planning is that it was used as a strategy-building tool in the build up towards a post-apartheid South Africa in 1992 (Kahane 2012).

These two examples reveal how scenario planning may be used for a variety of purposes. One is the story of how scenario planning has helped a company adapt to changes that were largely outside of their control. The other is the story of how national leaders attempted to embrace and control change in the hopes of steering their nation in a desired direction. The differences of

<sup>1</sup> Authors translation from Norwegian.

approach in these examples are suggestive of the different teachings about scenario planning found in academic literature.

Øverland breaks down these two approaches in the following manner, where:

1. In this first approach a number of possible scenarios are constructed. These function as ‘guidelines’ or background storylines for developing different strategies for dealing with the futures as presented, as was the case with Shell in 1973. This is the most common approach to scenario building and planning if you are not sure about future developments and also if you are unsure about your ability to influence future developments (2000, 17)<sup>2</sup>.
2. In the second approach there is desire for a certain scenario be realised. The scenario in question is constructed with a clear purpose, and strategies are developed to reach the desired scenario. This was the case in socio-economic planning in post-apartheid South Africa (2000, 17).

In line with this, based on his experiences from South Africa, Zimbabwe, and Palestine, Kahane (2012) insists that scenario planning needs to be a proactive tool for shaping the future, and that scenario planning be *transformative*.

Brunstad (2013) sketches out four settings where different types of groups will utilise scenario planning. Figure 10.1 illustrates these, where the horizontal axis defines the amount of influence a group has on its situation, and where the vertical axis defines the level of complexity of the group doing the scenario planning exercise. This provides four situations in which scenario planning can be utilised, and can be summed up as follows:

- A situation where a diverse group of influential stakeholders seek collective action (despite possible differences).
- A situation where a diverse group of non-influential stakeholders use scenario planning as a learning tool to gain understanding.
- A situation where a homogeneous group of influential stakeholders use scenario planning as a basis for making decisions and taking action.

<sup>2</sup> In a critique of scenario planning and its ability to change a corporation’s trajectory, Briggs (2008) comments that in the case of Shell scenario building holds little value except for being “pompous and self-aggrandising PR”. Briggs, who has 37 years of experience from Shell as an Executive, sides with Mercer (2006) who claims that an anonymous Shell CEO stated that the Shell scenario team was “bright” and produced work of a “very high intellectual level”, but that this did not make much difference when key decisions were being made.

Perhaps on the basis of such critiques, Heijden, who works mainly in the corporate world, insists that scenario planning, in addition to being academically analytical, needs to focus more on being a strategic tool for business management (2005).



Figure 10.1 Different groups that may use scenario planning (Brunstad 2013).

- A situation where a homogenous group of non-influential stakeholders use scenario planning to propose strategies and heighten preparedness.

Commonly this would require four different approaches to scenario planning. With this in mind, attempting to move away from the contention surrounding the usability of scenario planning as either strategic or transformative.

Usually urban planning tends to relate to diverse groups (i.e., with multiple claims or differences) that vary in their ability to influence a situation. Also, as presented in the previous chapters the connections between past, present, and future are crucial to planning, and that constructing scenarios is one way of observing and discussing relations between past, present and future(s). It is therefore in between the quadrants of ‘learning’ and ‘collective action’ that I will be using scenario planning in this afterword.

I will substantiate my choice based on Kahane’s experiences. Although Kahane describes scenario planning as a transformative tool, what is most clear from Kahane’s rendition of the Mont Fleur scenario exercises in South Africa in 1992 are the possibilities scenario planning provided as a platform for learning and discussion. Here, the construction of scenarios gave a unique possibility for aggressively opposing parties to come together and discuss futures. Kahane believes this to be possible because the exercise subtly alters the assumptions underlying the discussions. They are not discussing scenarios that they think *will* happen, or that they believe *should* happen in an ideological sense, but rather scenarios that *could* theoretically occur (2012, loc. 225). Based on that premise, Kahane says, even those vehemently opposed to one another were able to sit down and talk to one another *through* the scenarios (2012, loc. 248). Or as Hejlden phrases it: “the advantage of scenarios is that, unlike in a negotiation, people don’t have to commit” (2005, 242). This is an important point to note in other areas of tension – such as popular settlements under increasing pressure from private developers and officials.

My professional experience in planning practice has also proven the worth of scenario planning as vehicles for discussion among groups that are far apart, but may have a common interest in resolving issues. In my practice based experience with Rodeo Architects in Norway we have utilised scenario planning a number of times, notably in Fauske in 2007, a medium sized Norwegian town in the North of Norway, and on Hidra in 2008, a small island community along Norway’s southern coastline. We found scenario planning to be a useful tool for dialogue in both cases because there was a clear understanding from all parties involved that an intervention (physical or non-physical) had to be made in the community in order to better the situation for some clearly defined vulnerable groups (youth in Fauske, and the local, largely out of work population on Hidra). In both cases there were multiple actors involved, local as well as regional, all with different agendas. The scenario planning exercises allowed us to do three things:

1. Based on data collection and research, order a number of complex factors in ways that allowed for discussion.
2. Create a platform for dialogue and mutual understanding.
3. Develop sketches for (physical) interventions and redevelopments that were participatory and included a number of stakeholders including vulnerable groups.

### Scenario planning in this thesis<sup>3</sup>

Let me contextualise the above by constructing multiple scenarios for Pumwani. Scenario planning might be useful as a final part of a mapping exercise in popular settlements like Pumwani. Such places have a complex history, are influenced by a multiplicity of factors, and are populated by diverse stakeholders. More critically there is often tension and disagreement over how things should develop, and there are clearly defined ‘vulnerable’ groups that often have less possibility of being heard in planning processes.

The main task when constructing scenarios in a settlement such as Pumwani is not merely to uncover the scenarios themselves, but to suggest and discuss possible strategies and interventions for the local community to best cope with possible futures. Suggested intervention needs to address this by becoming one of maybe several flexible and durable ‘coping mechanism’ for the community given the possibility of scenario W, X, Y, or Z happening.

Also, scenarios should not be seen as exclusively separate from one another. As will be pointed out in the following exercises, there is a possibility that the elements from any of the suggested scenarios could be present in the future. Again, by planning for any of these scenarios through strategies and interventions, local populations in popular settlements could be better equipped to tackle future problems when they arise.

Scenario planning as used in this afterword will focus on the following exercises:

- Summarising possible factors influencing the settlement in the future. These factors will be gathered from the mappings done in Chapters Seven and Eight.
- Give the factors weight by placing them in a scenario matrix defining the importance of factors should they occur, as well as the certainty of their occurrence.
- Constructing a set of axes along which different future scenarios may occur.
- Describing each scenario, how it would affect the settlement, and discuss possible conflict and problems arising.
- Discuss possible interventions and strategies to cope with the futures presented by the scenarios. Also, discuss how some interventions and

<sup>3</sup> The following takes its cue from a series of workshops on scenario planning held by Brunstad in 2006 at the Oslo School of Architecture and Design while Brunstad worked as an analyst at ECON Pöyry.

strategies may work for some social groups and not for others, and what difficulties this presents for the planner.

All of the exercises would benefit from being carried out as group exercises, with participation from local residents as well as other stakeholders (local interest organisations, NGOs, CBOs, and government representatives).

#### SCENARIO PLANNING: THE CASE OF PUMWANI

##### A summary of possible factors

Figure 10.2 summarises the possible factors that might influence Pumwani in the future, by asking the question: ‘what factors, near and far – large and small, will possibly affect Pumwani in the next 10 years?’ The factors are ordered together in a series of Venn diagrams in order to better show the possible relationship between factors.

The sources of factors are the mapping exercises carried out in Chapters Seven and Eight. As such the factors presented here are not an exhaustive inventory of factors, given that the mappings in chapters Seven and Eight are not considered to be exhaustive mappings. Rather, as with the mapping method presented in those previous chapters, this is carried out to highlight how this particular scenario planning method works.

Compiling a list of possible factors may require extensive effort, depending on the scale and state of the data material used as a ‘database’. The approach adopted in the previous chapters, of constructing discrete categories of key issues and social groups here becomes valuable. The factors presented in Figure 10.2 are most comparable to the diagram presented in Figure 8.10 *Connecting interview topics to current issues*, where a detailing of topics dealt with in interviews are sought connected to larger societal issues of importance in Pumwani. In other words, most topics relating to key issues and social groups are brought to the fore.

The wording of the factors in Figure 10.2 differs slightly from the wording in Figure 8.10. This is done in order to give the factors directionality. As an example, the topic *Gikomba Market* in 8.10 is altered to *a growing Gikomba Market* in 9.2. Giving factors directionality such as this is important because the factors will later need to be gauged according to their *importance* and the *certainty* that they will occur. The question posed in the exercise – what factors (...), will possibly affect Pumwani in the next 10 years – also implies that factors with a sense of directionality are easier to place in the diagram.

The placement of factors in relation to each other in a series of Venn circles is suggestive. A number of other iterations could possibly be attempted, where



we may find that factors are related in other ways than what is presented here. This is also the point: the visual ordering of factors in relation to one another is the starting point for discussion and analysis of the findings in Chapters Seven and Eight. Such a visualisation might bring up questions regarding issues the previous mappings have failed to uncover. The exercise therefore provides the possibility of revisiting some of the data material and analyses already done. The diagram in Figure 10.2 is therefore not presented as etched in stone, but rather as *one* possible direction. Exercises such as producing this Venn diagram is best done as group exercises to cater for discussions and problematizing factors and their relationship with one another.

The Venn circles can also start to indicate hierarchies through simple visual arrangements such as grouping of smaller factors around major factors, exemplified in Figure 10.2 by the three major power institutions in Pumwani; *St John's*, *the Riyadha Mosque Committee*, and *the Chief*, circling the larger factor *continued influence on spatial and social developments by powerful institutions*. These considerations are also important discussions to raise – and are certainly possible to carry out as participatory group exercises.

Some factors may be so similar that they can be merged. Once the exercise is completed, factors are ready to be weighed and placed in a scenario matrix.

**The scenario matrix**

The scenario matrix (Figure 10.3) is a 3x3 matrix divided between *certain* and *uncertain* in one direction and *important* and *less important* in the other direction. The factors from the previous exercise are then weighed and placed within the matrix depending on how certain it is that the factor will occur in the future, and if it occurs, how important it will be for the project or case area. The question used when compiling the list of factors is slightly altered for this exercise: 1) 'how certain is it that factor X will occur in Pumwani in the next 10 years', and 2) 'if factor X occurs, how important will it be?'

By placing the factors into the matrix, it should be possible to compare the placement of factors with each other and adjust their placement accordingly. From experience factors will tend to group in the top sectors of the matrix, as most factors are seen as rather important. Because the matrix is not numbers-based, it only shows the relational difference between factors. This allows for adjustments: once the placing of factors is done, the matrix needs to be readjusted, so that those factors that are placed the lowest end up as "less

< Figure 10.2 Venn circles of factors affecting Pumwani over the next decade.





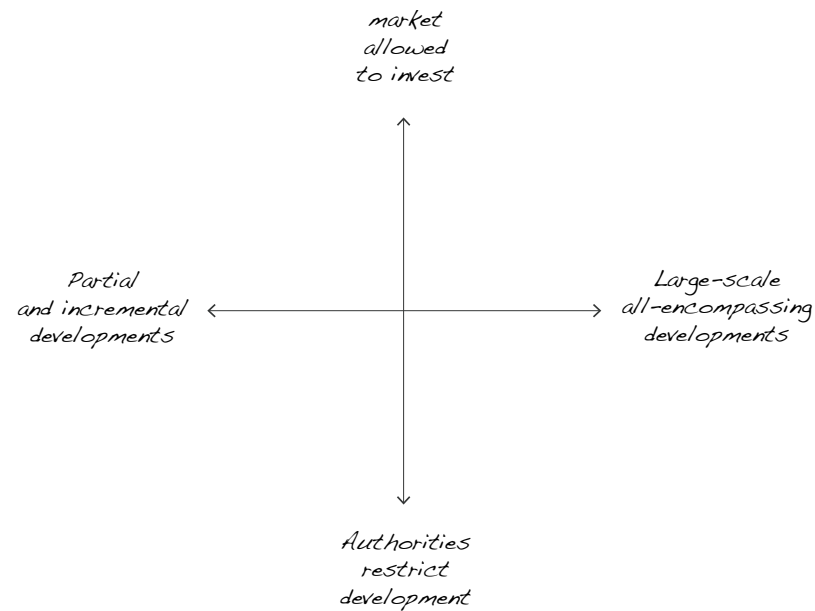


Figure 10.4 The scenario axes.

Other opposing pairs exist in the matrix, such as *loss of sense of community in Pumwani*, and *sense of community in Pumwani upheld*. These factors would have been unhelpful in an axis, because both factors are intrinsically connected to whether or not existing residents remain in Pumwani. As a result some of the scenarios would include existing residents moving from the area. One of the main tasks when planning interventions in Pumwani is to better conditions for existing residents. In scenarios where residents are already moving out, any suggested interventions would be too little too late. We therefore need to visit scenarios *before* such possibilities occur.

Also, in order not to clearly favour any one scenario, creating one ‘good’ and one ‘bad’, it is important to try to find as ‘neutral’ factors as possible for the axes. Although *private market driven* and *public investment* may not be completely neutral, both have positive and negative aspects.

### The scenarios

The crossing axes provide four broad alternative future scenarios. These are: 1) a private market driven incremental development of Pumwani, 2) a private market driven large-scale development, 3) a government initiated partial development, and 4) a government initiated large-scale development (see Figure 10.4).

For reasons of clarity it may be useful to give these scenarios names:

- 1) Entrepreneur Bonanza
- 2) Big Business
- 3) Small Scale Humanism
- 4) Social Housing Revisited

In a real-world situation the reality is that more factors would probably exist that introduce a range of other axes that could be useful to setting up more than four possible future outcomes. For instance, although the extremities of the axes are seen as opposing pairs, they may not be in complete conflict with one another. In the case of Pumwani a development controlled by authorities may not exclude market driven developments.

For the purpose of this exercise, I will start by focusing on the four suggested scenarios, while keeping in mind that reality is never as uncluttered, and that there need not be clear or discrete distinctions between the scenarios (that the future may ‘travel’ between the scenarios).

Again, the main point of such an exercise is to get community participants and other stakeholders together in order to discuss possible interventions in a community. Heijden holds that scenario planning opens up for the possibility for conversation among stakeholders, making it an increasingly popular planning method in the public sector, where promotion of democracy is a key goal (2005, 159). Indeed, creating these four (or more) scenarios is a good starting point for discussing future possibilities and risks for all groups in a community. Keep in mind that the wealth of data and analysis collected in Chapters Seven and Eight can be used to enhance discussions and give the scenarios needed weight. I will here outline briefly what these four scenario stories could be.

#### *Entrepreneur Bonanza*

In this scenario landlords and landladies with allotment letters are given title deeds to their properties. This results in most landlords and landladies selling their properties on the open market. There is fierce competition over plots, as Pumwani is prime land.

Most of the real estate is sold off to investors with land and housing in Eastleigh. Some land is retained by wealthier original landlords that seek to make a profit: a series of cooperative franchises are started where existing middle class and elite landlords group together to develop their joint plots to maximise on profit.

A number of small-scale high rises of different character start developing. Those with funding are able to pull this off rather quickly, while other projects fail to gather the required capital. Developments in Pumwani start resembling a mix of developments in Eastleigh and the tenement developments in e.g. Kayole.

The building typology is dense, with a blend of business and housing. Due to the closeness to the CBD and the proximity to Gikomba Market, small to mid scale business flourishes in Pumwani. Over time the lucrative area and new developments force rents up. The Majengo houses disappear, and original tenants and most landlords and landladies need to relocate to places further afield.

#### *Big Business*

Like in the previous scenario landlords and landladies with allotment letters are given title deeds to their properties. This results in most landlords and landladies selling their properties on the open market. There is fierce competition over plots, as Pumwani is prime land.

While some of the real estate is sold to small-scale investors and speculators, larger, national real estate enterprises that are establishing middle class housing projects in neighbouring areas recognise the potential in Pumwani as an important extension to their developments. These companies are therefore quick to buy up properties once they are on the market – rumoured to be assisted from within the Ministry of Lands. These large nationals are also able to buy up properties already sold to smaller investors for a higher price. Pumwani is developed at a rapid pace, with large apartment blocks, and a few ground floor business developments.

The closeness of Pumwani to the city, the location of the market, the housing developments surrounding the area, and the Machacos Bus station makes it an ideally situated spot for middle class housing.

Gikomba Market comes under pressure from the real estate developments. Some of the trade is able to readjust to fit Pumwani's new profile. Large parts of the Mitumba trade relocates to cheaper trading venues.

#### *Small-Scale Humanism*

Plans for the final stages of the long awaited social housing redevelopment scheme never seem to materialise. Pressure and lobby efforts applied through a joint effort by forceful organisations in Pumwani are successful in lifting some restrictions on building with permanent materials. Other parts of Pumwani are still not developed, still with an uncertain future.

Housing co-ops together with local government are able to back funding for self built permanent rental structures in Pumwani. A few landlords are also able to fund such ventures on their own. A few housing units are rebuilt in the original Majengo style, but stricter enforcements of by-laws require landlords to tear down most extensions. In order to cater for the effected tenants, allowances are given for two – three storey structures. The planning and construction of these units is self-driven, with assistance from local NGOs.

A number of amenities are established in key areas, while possibilities for small-scale businesses are sought catered for.

The increase in rent as a result of the housing improvement results in almost half of the original tenant population having to relocate. It is rumoured that larger landlords are amassing property through smaller landlords, by fronting their initial loans to construct better housing, and later benefiting off increased rents.

#### *Social Housing Revisited*

Plans for the final phases of the redevelopment scheme are finally put into motion after years of lacking funds. The project picks up where the Highrise redevelopment scheme left off in 2004. The new scheme is set in motion through a series of phases, based on neighbourhood units. Remaining areas in Bash are redeveloped first, then Sofia, Digo, and finally Mashimoni, which allows for some business developments to occur along Digo Rd.

The developments are rapidly put into motion, well assisted by international funding. Some larger recreational areas are also implemented in the vicinity of the Old Social Hall. In addition to the Social Hall, some buildings of historical value are retained. Amenities are constructed along the major thoroughfares.

The Majengo houses are all torn down, and landlords that can afford it are provided with new rental units in the new blocks, copying the system from the initial Highrise developments. A limited number of tenants are able to move into the new housing schemes, which ultimately prove more costly than originally intended.

#### **Possible interventions and strategies**

##### *A reality check*

These four scenarios are brief, idealised stories. The major factors at play in each scenario have been fleshed out with details that may be considered speculative rather than factual, but none the less spring out of the research

carried out in Chapters Seven and Eight. Also, we know from the mappings done in Chapters Seven and Eight that reality in Pumwani can be much more complex than what these four scenarios manage to capture. The four idealised scenarios are however useful exercises to perform because they help make clear for planners and participants alike some of the possible major changes and challenges the community might face, as described by Kahane (2012, loc 885) in his work with Zimbabwean leaders. In it he uses scenario planning “to help get their country onto a better path” (2012, loc 506). Because scenario stories only highlight some factors in a very specific way, they can help kick-start discussions regarding how factors might effect future developments in other ways. Different stories can of course be suggested through group discussions.

A blend of all four scenarios can be a likely outcome. It is possible to allow the market to invest while authorities control developments (for instance through a public-private partnership). Also, in future plans for the community neighbourhoods may be sectioned for different projects, with different deadlines. Thus rapid as well as incremental developments may occur simultaneously.

With all this in mind I suggest concluding the scenarios by listing up the major challenges that have been brought to the fore (visualised in Figure 10.5).

**Entrepreneur Bonanza:**

- *Business as usual, with little real improvement for many.* Although some developments will occur, some would be investors might have trouble financing building projects. Money will be saved by ‘cutting corners’, and tenants will perhaps see any real improvement in house standards despite use of permanent materials and increases in rent.
- *Partial developments exacerbate polarisation.* Some developments may be more ‘high-end’ than others, creating new and more exacerbated differences within neighbourhoods. Gating may occur.

**Big Business:**

- *Most landlords only reap short-term benefits.* The initial selling of plots will generate income for landlords and landladies, but this will not be a sustained, durable income.
- *All tenant groups loose out.* If Pumwani is developed into middle class housing, there are very few tenants that will be able to pay rents. In such a scenario there is a real chance that most all tenants will have to relocate. Some landlords may be able to return to Pumwani as tenants.

<p><i>Entrepreneur Bonanza:</i> Private market driven multiple small-scale and incremental entrepreneur and housing developments</p> <p><i>Conflicts/Challenges:</i></p> <ul style="list-style-type: none"> <li>- Business as usual, with little real improvement for many</li> <li>- Partial developments exacerbate polarisation</li> </ul>	<p><i>Big Business:</i> Private market driven large-scale housing and business development</p> <p><i>Conflicts/Challenges:</i></p> <ul style="list-style-type: none"> <li>- Most landlords only reap short term benefits</li> <li>- All tenant groups loose out</li> <li>- Likelihood of complete gentrification</li> </ul>
<p><i>Small-scale Humanism:</i> Government approved incremental development largely driven by community agents</p> <p><i>Conflicts/Challenges:</i></p> <ul style="list-style-type: none"> <li>- Likely controlled by Pumwani elite</li> <li>- Partial developments favour those with more funds</li> <li>- Exacerbation of differences</li> </ul>	<p><i>Social Housing Revisited:</i> Government controlled large-scale social housing scheme</p> <p><i>Conflicts/Challenges:</i></p> <ul style="list-style-type: none"> <li>- Same dev. plans as earlier?</li> <li>- Favours moneyed landlords</li> <li>- History suggests partial dev. despite large-scale plans</li> <li>- Displacement of many tenants</li> </ul>

Fig 10.5 Likely conflicts and challenges in the scenarios.

- *Likelihood of complete gentrification.* The scenario implies a complete gentrification of Pumwani, meaning that existing social groups will be replaced by social groups with greater economic wherewithal.

**Small-Scale Humanism:**

- *Likely controlled by Pumwani elite.* If a provision of title deeds is given to existing landlords, this could provide an opportunity for the elite landlords, and possibly middle class landlords to invest in their own and other’s real estate as business opportunities. This can effectively shift the internal power balance in Pumwani, especially if interest organisations like the Pumwani Landlords Association are used as fulcrums to provide a few landlords with substantial real estate.
- *Partial developments favour those with more funds.* An incremental upgrading of Pumwani will continue the social imbalance observable today between Highrise residents and Majengo residents. People with economic wherewithal will be able to move into developed housing. Those without funds will remain in housing under poor conditions.

- *Exacerbation of differences.* Partial and piecemeal redevelopments on a small scale will only provide a few residents with better opportunities.

Social Housing Revisited:

- *Same development plans as earlier?* There is a real possibility that the planned redevelopment schemes will function as a continuation of the latest Highrise scheme from 2004, without evaluation of the consequences of the already implemented schemes.
- *Favours moneyed landlords.* A continuation of redevelopment plans will, as earlier, favour moneyed landlords who have the wherewithal to invest in larger apartments, thus maximising on their ability to sublet.
- *History suggests partial developments despite large-scale plans.* All historical evidence suggests that despite government plans of all-encompassing redevelopments, attempts at social housing projects will not be completed due to shortage of funds. The process will in reality be incremental, while the plans will be based on a fully-fledged development of the entire area.
- *Displacement of many tenants.* Large-scale social housing projects cater to the middle class. A large proportion of the population in Pumwani will be displaced as a result of a large-scale social housing scheme, as NCC and other agents have yet to show that such schemes actually benefit the poor.

Presenting the scenarios in the manner done here makes it possible to not only discuss conflicts and challenges, but also possibilities and opportunities, as exemplified in Figure 10.6. Constructing scenarios and discussing their implications can prove valuable to participatory processes where many stakeholders and interests are present. It is here that the mapping in Part II can be concluded, and on the basis of this that suggestions for strategies and interventions can be made.

CONCLUSIONS

In this afterword a number of scenarios are constructed from the database provided by the mappings in Chapters Seven and Eight. I do this based on a *Foresight* method described by Kahane (2012), Brunstad (2006), and others. As a whole the mapping method becomes highly accountable. It should ultimately be possible to backtrack conclusions provided in this afterword to historical events unearthed in Chapter Seven.

In general the mapping and subsequent construction of scenarios indicate that the poorest groups in Pumwani – mainly represented by proletarian tenants

<p><i>Entrepreneur Bonanza:</i> Private market driven multiple small-scale and incremental entrepreneur and housing developments</p> <p><i>Possibilities/opportunities:</i> - Cooperative resident franchises - Org landlord amalgamation of property</p>	<p><i>Big Business:</i> Private market driven large-scale housing and business development</p> <p><i>Possibilities/opportunities:</i> ...</p>
<p><i>Small-scale Humanism:</i> Government approved incremental development largely driven by community agents</p> <p><i>Possibilities/opportunities:</i> - Resident initiated building coops - Cooperation between (new?) orgs and residents in construction and community projects.</p>	<p><i>Social Housing Revisited:</i> Government controlled large-scale social housing scheme</p> <p><i>Possibilities/opportunities:</i> - Resident influence on plans through lobby groups - Cooperation between power orgs and residents in influencing govt.</p>

Figure 10.6 Scenarios with possibilities and opportunities

and unskilled and unemployed – stand the most to lose in any development. There is a real risk that this group will be displaced in any event, because all developments will result in increased rents. Unless provision of jobs or other income generating activities are supplied, no matter how small the rent increase, a number of current tenants will have to relocate. Addressing such issues is in many ways outside the scope of this mapping exercise, because it arguably hinges on structural changes occurring on a national level rather than at local neighbourhood level.

If we return to what this mapping can address, it also reveals that most tenant groups stand more to lose in any scenario as opposed to landlord and landlady groups. That having been said, some landlord and landlady groups would seem especially vulnerable to large-scale changes, while they might prosper from small-scale change.

Through the mapping carried out in Chapters Seven and Eight, and the subsequent placement of factors in the scenario matrix, the *sense of*

*community (ujamaa)* specific to Pumwani stands out as the cornerstone on which much of Pumwani society rests; residents of all social groups identify with it, creating a common bond despite differences; it provides a sense of security – not only perceived, but also highly real – in that community organisations, neighbours, family and friends create a social and economic security network; and that the housing, despite its dilapidated state becomes symbolic of this sense of *ujamaa*.

Throughout these last chapters I have shown that this particular organising of Pumwani community is intrinsically linked to original tenants and original landlords, and their common Swahili culture. Replacing one or the other rocks the delicate balance of the community. The scenarios reveal that when replacing one group or the other, there is a risk of losing this sense of community, and that this might be the unravelling of Pumwani. The risk is especially acute in the case of large-scale developments.

As such, strategies and interventions should not focus on one group, as there are strong relations and dependencies between for example the poorer groups and more affluent groups. Securing landlord groups and more affluent tenant groups would therefore be an important step on the way to retaining a sense of community – and the social security that this sense of community affords – for the more marginalised groups.

In this respect it is also important to remember the powerful institutions that work in Pumwani. Including these existing organisations along with community group representatives when discussing what the sense of community in Pumwani is and how to retain it could provide the grounds for increased cooperation between the powerful and less powerful.

In the end, current distinctions between those with power and those without will quite possibly only intensify. However, the mapping and scenarios indicate that alternative routes can be staked out for those seeking to upgrade housing and amenities while upholding the existing community in Pumwani: organisational structures may need to be provided in a much more robust form than what today's savings groups and merry-go-rounds provide – structures such as building cooperatives which allow resident and landlord groups to pool resources more effectively. Some of the more commercially viable CBOs in Pumwani are indicative of this, as are building coops in other parts of Nairobi e.g. Huruma, and historically in Mathare (Etherton 1971). This would allow groups that currently are without much political and monetary power to attempt to match real estate investors in the case of a privatisation of land in Pumwani, and to function as a lobby group with legitimate claims in the case of a government controlled development of the area. The existence of such new power structures could be vital to developing

a new identity for Pumwani – an identity that needs to be rooted on old traditions and existing social security networks, while improving physical conditions.

As future developments are uncertain, there is good reason for all of the above to be further investigated when iterating strategies and interventions for planning purposes in Pumwani. In all of these processes the historical and current events and groups that have come to shape Pumwani need to be thoroughly considered and discussed in participation with local representatives. This would be a vast improvement from earlier redevelopment phases: while residents were included in debates regarding the Calfonya redevelopment scheme in the 1960s, none of them were provided with any possibility for understanding their own situation in light of the impending changes, or what these changes would mean to them. The result was that many lost out on the possibilities afforded by the scheme (Hake 1977). If residents and authorities had been provided with the kind of mapping suggested in this thesis they would arguably had a different basis from which to discuss and make important decisions regarding Pumwani's future.

Such work needs to be carried out in a mixture of settings, not only through participatory processes with local groups and stakeholders, but I would argue, where added analysis is needed, also in a more 'classical' academic setting. As highlighted by the *extreme* participatory mapping efforts in Chapter Three, a complete trust in participatory inputs in mapping may provide dubious results. The mapping process highlighted in Part II of this thesis clearly points out that interdisciplinary academic analysis is necessary in mapping, and that such analysis can work alongside participatory processes.

Ultimately, leaning on Brunstad (2013), the mapping method, and subsequent scenario planning can be seen as a tool for knowledge acquisition, discussion, and lobbying by Pumwani residents – as diverse as they may be. The framing of factors, issues, groups, and organisations in scenarios provides residents and those involved in planning processes with a common platform from which to initiate discussions about, and possible demands for the future of a community. It is on the basis of this that iterations of strategies and interventions can be formed.

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- Respondent BB, Beer Brewer interviewed in Pumwani, Nairobi December 4<sup>th</sup> 2012.
- Respondent BS, Young intellectual interviewed in Pumwani, Nairobi April 24<sup>th</sup> and December 02<sup>nd</sup> 2012.
- Respondent CC, Chief's Elder representative interviewed in Pumwani April 25<sup>th</sup> 2012.
- Respondent EWT, Elderly Woman Tenant interviewed in Pumwani, Nairobi April 27<sup>th</sup> 2012.
- Respondent JO, Young intellectual interviewed in Pumwani, Nairobi December 3<sup>rd</sup> 2012.

Respondent JS, Skilled tenant interviewed in Pumwani, Nairobi November 30<sup>th</sup> 2012.

Respondent KI, Youth Group representative interviewed in Pumwani, Nairobi June 11<sup>th</sup> 2009 and April 27<sup>th</sup> 2012.

Respondent LL-B, Landlord interviewed in Pumwani, Nairobi April 26<sup>th</sup> 2012 and November 29<sup>th</sup> 2012.

Respondent LL-D, Landlady interviewed in Pumwani, Nairobi December 1<sup>st</sup> 2012.

Respondent MP, Prostitute interviewed in Pumwani, Nairobi December 02<sup>th</sup> 2012.

Respondent PT, Pamoja Trust staff interviewed in Huruma, Nairobi June 19<sup>th</sup> 2009.

Respondent PSJ, St John's administrative staff interviewed in Pumwani, Nairobi December 03<sup>rd</sup> 2012.

Respondent RI, Research International staff interviewed in Westlands, Nairobi April 28<sup>th</sup> 2011.

Respondent RMC, Riyadha Mosque Committee representative interviewed in Pumwani December 6<sup>th</sup> 2012.

Respondent SJ, St John's administrative staff interviewed in Pumwani, Nairobi December 03<sup>rd</sup> 2012.

Respondent SSJ, St John's administrative staff interviewed in Pumwani, Nairobi December 03<sup>rd</sup> 2012.

Respondent TU, High-ranking COTU-K representative interviewed in Mashimoni, Pumwani, December 05<sup>th</sup> 2012.

Respondent UR, Youth Group representative interviewed in Pumwani, Nairobi December 03<sup>rd</sup> 2012.

## Appendix A

### PUA TOOLS USED BY PTPI IN THE KOROGOCHO SOCIO-ECONOMIC SURVEY (2010)

	Tools	Aim	Expected Result
1	History/ History Timeline	To understand the common background of the village, and how events and changes in the past have contributed to create the reality of today. Information about past projects, historical events, groups within the village, leadership and internal problems should be explored during this exercise.	History timeline Village History  Problems and opportunities
2	Shared vision	To understand the common aspects the village commonly proud of and the common shared vision of the village.	A list of 10-15 good things about the village (starts with most important 3 items)  A list of 0-15 things the village would like to see in future (starts with most important 3 items) Problems and opportunities
3	Area mapping	The aim of this tool is to enable the team and the community representatives to understand the overall lay-out of the village: location of the other surrounding villages and their relationships between them in terms of boundaries and shared resources, location of homesteads, types of housing, services available and physical infrastructure.	A village sketch map

	Tools	Aim	Expected Result
4	Transect Walk	The aim of this tool is to learn about the availability of various services, infrastructure and facilities, socio-economic activities, problems and opportunities through direct observation and casual interviews along the way.	A chart showing availability of various services, infrastructure, facilities, socio economic activities, problem and opportunities.
5	Housing Sketch Design	The aim of this tool is to solicit community's perceived design for appropriate settlement improvement and service delivery in their village.	An ideal Korogocho house sketch design, problems and opportunities.
6	Community Data Bank	A data bank is a tool for collecting information and data on various issues affecting the community as per sector. The tool shows the quality perceived problem, solution, development need, other needs and key players as per sector.	A filled data bank chart.  Problems and opportunities.
7	Population Trend	Aim of this tool is to understand the changes that have taken place in recent years especially in relation to population, why these trends take place, and the implications of these trends for future development. Establish the growth levels or maybe also decline due to eviction, conflicts, migration etc.	Population trend chart and explanation of why the trend.  Problems and opportunities.
8	Migration Trend	Establish changes in migration which could mean people coming to or from the village due to e.g. hiking of rents or rents are affordable, insecurity or better security, easy access or difficult to access etc.	Migration trend chart and explanation of why the trend.  Problems and opportunities.
9	Settlement pattern	Establish the changes in settlement patterns, including arrangement of houses, settlement in the public space, a long access roads etc.	Settlement patterns trend chart and explanation of why the trend.  Problems and opportunities

	Tools	Aim	Expected Result
10	Food security	Estimate the household food security situation (stock of staple food, or number of meals taken per day) during the period.	Food security trend chart and explanation of why the trend.  Problems and opportunities.
11	Eviction	Establish major evictions that have taken place in the area in the last 10 years.	Eviction trend and explanation of why the trend.  Problems and opportunities
12	Tenants Analysis	To establish the number of households heads dependants and gender distribution.  To draw a sketch layout of the current set up at a household level.	Number of households' heads and the number of households. Household's dependants and gender distribution partition at the household level. Sketch layout of the current set up at a household level.
13	Landlords profile analysis	To establish the number of landlords  And number of tenants per landlord.	Number of landlords and tenants per landlord
14	Development indicators	Establish for the last 10 years how road network has been maintained.	Problems and opportunities.
15	Occurrence of diseases	Establish for the last 10 years, the major diseases outbreak that has taken place.	Occurrence of diseases trend chart and explanation of why the trend.  Problems and opportunities.

	Tools	Aim	Expected Result
16	Labour availability	Labor availability/ demand: determine when during the year there is excess family labour and household members look for employment elsewhere; when there is full employment (everybody is busy) and when there is shortage of labour and hiring of casual labour is common.	Labour availability trend chart and explanation of why the trend.  Problems and opportunities.
17	Cash flow availability	Establish for the last 10 years how cash-flow availability have changed.	Cash flow availability trend chart and explanation of why the trend.  Problems and opportunities
18	Educational facility	Establish for the last 10 years how education facility has improved or deteriorated.	Educational facility trend chart and explanation of why the trend.  Problems and opportunities.
19	Health services availability	Establish for the last 10 years how health services availability have changed.	Health services availability trend chart and explanation of why the trend.  Problems and opportunities.
20	Housing Disasters	Establish for the last 10 years some of house disasters that have happened.	Housing disasters trend chart and explanation of why the trend.  Problems and opportunities.

	Tools	Aim	Expected Result
21	Water services availability	Establish for the last 10 years how water availability have changed	Water services availability trend chart and explanation of why the trend. Problems and opportunities.
22	Tenancy trend	Establish for the last 10 years and how harassment and fights have changed.	Tenancy trend chart and explanation of why the trend.  Problems and opportunities.
23	Skills availability	Establish for the last 10 years how skills availability has developed.	Skills availability trend chart and explanation of why the trend.  Problems and opportunities.
24	Food and income sources	The intention of this tool is to understand changes that take place during a calendar year. Changes include all activities in the village and how this relates to availability or shortage of things; how this change affects people's lives and livelihood; how problems recur periodically; which times of the year show concentration of problems and /or activities; and what times would be most appropriate for development initiatives.	Food and income sources seasonal calendar.  Problems and opportunities.
25	Network Analysis	To understand the existing network system and how information is provided and shared. To understand how/if the community groups, organizations, local authorities work together and consequently in which manner the process of communication could be improved.	A graphic visualizing the existing network, its lacks and challenges and opportunities for improvements

	Tools	Aim	Expected Result
26	Institution Analysis	To understand and identify the role and importance of the various groups and institutions in the village. Formal institution, private sector and government representative. Informal groups i.e. local and economic activities groups, and to clarify the potential role of local institution in the village.	A list and characteristics of local institution.  A list and characteristics of formal institution  Relationship of the formal and informal organization with the village (Venn diagram)  Problems and opportunities.
27	Social Stratification	To understand and establish the inequalities and differences in wealth in the community, establish local indicators of wealth and well being, hence the relative position of household in the community.	A list of wealth classification and indicators of each.  Problems and opportunities.
28	Gender analysis	To understand and identify gender roles and responsibility in the community.	A 24-hour chart showing men, women and youth activities.  Problems and opportunities.
29	Household resource management	Understand the decision making process and identify the asset at household level; their access to men, women and children.	A chart showing items in a household what men, women and children controls.  Problems and opportunities.
30	Community conflict management	To understand the role and importance of various individuals and institution in the village regarding the existing mechanisms locally dealing with conflict.	A chart showing conflicts in the community and the resolving mechanism.  Problems and opportunities.

	Tools	Aim	Expected Result
31	Household income and expenditure	To understand the sources of household income and also how they spend their income.	A chart showing a household income and expenditure.  Problems and opportunities.
32	Mobility mapping	To collect and analyze data on the communities mobility in the project area and indicating mobility of the various segments of the population.	A chart showing where the community go for various services within and without the village. It also shows which roads / tracks they are using  Problems and opportunities.
33	Hot spot Analysis/ Mapping	To collect and analyze data on nature and location of high incidents of crime and violence, which pose major security problems to the community.	A map indicating insecurity hotspots in various villages, showing type and location of crime/ violence and providing a guide for safety interventions.
34	Safety Audit	To give specific in-depth information on spatial/ infrastructure contributors of insecurity and provide recommendations on physical/ spatial interventions that would improve security.	Questionnaire findings and recommendations on ways to improve security/safety.
35	Sanitation and hygiene	Establish for the last 10 years how sanitation and hygienic environment has changed.  To create an understanding on health and sanitation issues level of primary health care in the community and also identifying the existing sanitation facilities at the community level.	Health and sanitation analysis chart.  Problems and opportunities.



	Tools	Aim	Expected Result
36	Common diseases	Determine the dominant the main occurrences of disease among people, at what times of the year they are dominant and how serious they are.	Problems and opportunities.
37	HIV/AIDs Assessment	Need understands the extent to which it has impacted on people. This will be assessed using the following tools.	HIV/AIDs extent analysis chart. Problems and opportunities.
38	Existing and required skills	Understand and identify the existing management and technological skills existing in the project area i.e. skills that can be offered by men and women for project management.	Problems and opportunities
39	Sustainability Analysis	The aim of this tool is to facilitate community's reflection exercise on development activities they have initiated, articulate their goals and objectives, expected output and impact indicators, and assess their strength and weakness in implementing these activities. Establish the sustainability position and elicit suggestions on how to deal with their weakness.	Problems and opportunities.
40	Livelihood analysis	Livelihood analysis will enable the community to identify the things they are self sufficient in, the things they partially produce and those that they must get from outside.	Problems and opportunities.
41	Validation meeting	To present and review collected data by various informants for the last three days.	Problems and opportunities.
42	Problems ranking	Present problems that have been mentioned and observed; discuss problems, get "village-consensus" on priority problems including reasons why and carry out a pair wise ranking.	Pair wise problem ranking chart.

	Tools	Aim	Expected Result
43	Opportunities Ranking	Present opportunities that have been mentioned and observed, discuss opportunities including reasons why and carry out a pair wise ranking.	Pair wise ranking opportunities chart.
44	Community Declaration	Discuss the alternatives and reach initial agreement on the most suitable and preferred type of village development project, discuss implications including responsibilities during preparation (discussions), implementation (community contribution in cash and in kind, group organizational strengthening, training, creating by-laws, maintenance fund etc) and operation (O & M) and create Village Development Plan incorporating the 2-3 selected priority projects.	

## Appendix B

### REVIEW OF CLAIMS MADE BY PAMOJA TRUST/SDI IN NAIROBI SLUM INVENTORY

<i>From Nairobi Slum Inventory</i>	<i>From other sources and respondent interviews</i>	<i>Possible consequences/impacts</i>
<p>“The occupation then was that of a single occupant per plot that today has a population of 15 households.”</p>	<p>The first plots were allocated to single households, not single occupants.</p> <p>There may be extreme cases of 15 households per plot, but normally 8-10. (Interviews 2012)</p>	<p>Could have ramifications relating to densities and upgrade schemes. The difference between 8 and 15 households would seriously affect plans for improvements that rely on quantitative data.</p>
<p>“Those who could not afford to buy the plots were pushed into constructing extensions on the open lands that were available to them at the same place. They view themselves as owners because they have either lived here for too long or do not have any other place to call home or own the extensions and see their structures being equal to the other plots.”</p>	<p>From my mapping of Pumwani all respondents agreed that only landlords or landladies build extensions on plots. People residing in these extensions are without exception tenants.</p> <p>I have been unable to find any sources to indicate that there are extension owners other than legitimate landlords/landladies.</p>	<p>Could have ramifications for landlords who have invested in extensions that could lose these investments. Landlords as a group could be weakened which could prove a threat to stable power structures in Pumwani.</p>
<p>“However, most of the landlords are incapacitated because the rents are too low or tenants have refused paying, citing their long stay in these houses as a warranty for ownership.”</p>	<p>There is no evidence to support the claim that tenants in Majengo see themselves as structure owners, despite having lived in the same location for several generations. (Interviews 2012)</p>	<p>Conflicts are created that do not exist. If such information was acted on in the planning of interventions, efforts; time, money, and focus would be wasted.</p>

<p>“The land here is private and was allocated to different individuals shortly after independence. The majority of the owners, however, do not possess any legal document to the claim that they own the said parcels of land.”</p>	<p>The land belongs to the Nairobi City Council. Ownership of structures was allocated to different individuals shortly after construction in 1922. Owners possess legal documents (allotment letters) giving them right to lease the land, and to build on it. There are a few unverified claims of land (plots) being bought by private individuals (that title deeds have been given), but the claims are not verified by the alleged owners. Individual businessmen are striving to attain title deeds for their leased plots. They claim to be in negotiations with authorities, but none have thus far succeeded. (Interviews 2012)</p>	<p>This is also a constructed reality that muddles and makes difficult any upgrading scheme due problems related to private land. As the land is City Council owned, opening up to speculations regarding private ownership could possibly lead to attempts of land grabbing, exploitation, etc.</p>
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## Appendix C

### INITIAL INTERVIEW GUIDE

For the interviews the following main groups and sub groups can be identified:

- Local residents (LR)
  - Landlords (LR-L)
  - Homeowners (LR-H)
  - Tenants (LR-T)
- Commercial actors (CA)
  - Successful/up and coming (CA +)
  - Subsistence (CA –)
  - Muslim entrepreneurs (CA-M)
- NGOs/CBOs
- Authorities (A)

Possible other main groups and sub-groups will have to be defined during the course of the fieldwork. The following questions have been modified to best relate to the respective main groups and sub-groups. If some questions pertain to specific subgroups this will be indicated in brackets.

#### Local residents (LR)

##### Initial questions

- Name, date of birth
- Work: What and where
- Family / Married / Family members

##### Establishing what and where Pumwani is

- What areas or neighbourhoods do you consider to be part of Pumwani?
- Is Pumwani the same as Majengo, or is it a larger area? Where would you say the boundaries of Majengo are?
- Is Shauri Moyo a part of Pumwani? What about California? What about Bondeni and Gorofani?

##### Belonging, identity, and place

- Where in Pumwani do you live? How long have you lived here? Have you lived other places in Pumwani?
- Have you lived elsewhere in Nairobi? Where?
- Is it common to move about/shift homes in Nairobi? Is it common in Pumwani?
- Do you consider yourself as coming from Nairobi or Pumwani?
- Would you consider living elsewhere in Nairobi? Why or why not?

- Where were you born?
- Do you have a home upcountry? If yes, is this place important to you? Where is your ‘home place’?
- What does ‘being from Pumwani’ mean to you?
- Are you a city person? What does that mean to you? Do you see yourself as different from people coming from the villages/upcountry?
- Do you like Nairobi? If yes, what do you like about Nairobi? If no, what do you not like?
- Sometimes Pumwani is called a ‘village’. What do you think this means?
- Are there other parts of Nairobi that that you would call ‘villages’?
- What do you feel people think of you when you tell them that you come from Pumwani? What if someone comes from Nairobi South, what do you think people feel about Nairobi South residents? What about if you come from Mathare?
- If people know that you come from Pumwani, do you think it affects your/people’s possibilities of getting a job?
- Is Pumwani like any other neighbourhood or is it special in any way?
- Do you work in Pumwani or other places? How do/did you get there?
- Do you often visit down town and why?
- Do you have family/friends elsewhere in Nairobi? Is it easy for you to visit them?
- Where do you mostly go when you go outside of Pumwani?
- Does the river have any particular meaning to you?

##### Class, race, and colonial history

- Do you know the history of Pumwani from the colonial times?  
*If the person has lived in Pumwani a long time:* Have things changed much over time? What in particular would you say has changed?
- How different are people in Pumwani or in your neighbourhood from one another? Do they come from different places? Do some people have more money than others? Is how much money you have more important than what tribe you come from – or is it the other way around?
- Would you say that there are very wealthy people in Pumwani? How do wealthy people in Pumwani make a living?
- Would you say that people in Pumwani are united (ujamaa) or different? If they are different from one another could you say that there are clear groups to which one would ‘belong’?
- Do you think the feeling of ujamaa *or* difference the same in other parts of Nairobi?
- Are you closely connected to the people in your local community? Do you help each other out?

##### Swahili influence

- What is your relationship to the Muslim community? Do you see Muslims as belonging to a separate community than yours? Do you socialise or do business with Muslims?

- Would you say that your relationship to Muslims is typical for people in Pumwani?
- Would you say the relationship between Muslims and Christians in Pumwani is typical for Nairobi?
- Do the Muslim and Christian neighbourhoods feel or look different from one another? If yes, in what way?
- Do you feel that it is important to distinguish between the Christian community and the Muslim community?
- Is the relationship between Christians and Muslims different now than before? If so, how?
- Which language do you prefer to use at home? Swahili or another language? Do you think about the fact that the Swahili language comes from the coast, and that it is a part of Swahili/Muslim culture?
- Some CBOs/NGOs in Pumwani are Christian (e.g. St John's) and some are Muslim (e.g. Pumwani Ryadha Mosque Committee). Do you think it is important to have organisations that represent Christians and others that represent Muslims?

#### Somali presence

- Do you feel that there are a lot of Somalis in Pumwani?
- What do Somalis do in Pumwani? How do they live? Where do they work?
- How are they different from other people?

#### Distinctions between CBOs and NGOs

- How often do you have to deal with local authorities? What is your relationship to local authorities?
- If you have a problem or a dispute (regarding your house/courtyard/stall), is it best to resolve this through local authorities? Or do you take your case elsewhere?
- Who do you think is best at resolving issues in your neighbourhood? An NGO/CBO? Local authorities? Someone else?
- Are there rules for where you can build or do business? Who decides these rules?
- Do you belong to an NGO or a CBO? If yes, which ones and why? Do most people belong to an organisation?
- Do you feel that NGOs/CBOs are doing important work in Pumwani?

#### Development schemes in 1968, 1987, and 2002

- What was altered or built in these schemes? Were any of the old/existing structures torn down to make way for new buildings?
- What, in your opinion, were the consequences of these schemes?
- If houses were torn down, were the owners compensated? Did any of the 'original' residents get new homes in the new building schemes?

- Were local people involved in the development schemes?
- Is the 1968 scheme the area called California?

#### Work

- Do you work in Pumwani? What do you do?
- Is hawking illegal? Does everyone need a licence?
- Do hawkers living in Pumwani go outside of Pumwani to sell their goods?

#### Ownership structures (LR-T)

- Who would you say owns houses in Pumwani?
- In your experience, do landlords normally live in Pumwani? Do you regard Pumwani landlords that live outside of Pumwani as being from Pumwani?
- Is there any difference between people owning and people renting?
- Do people that own houses mix with tenants? Do they generally have a good or bad relationship?
- Is right of tenure an issue you feel is important?
- Who, in your opinion, decides who has right of tenure? The landlord? NCC? Government? Elders? Other councils?

#### **Questions specifically for Landlords and Homeowners**

#### Ownership structures (LR-L/LR-H)

- Are you a homeowner in Pumwani? Majengo or somewhere else? Do you rent rooms to others? Do you consider yourself a landlord? For how long have you been a landlord?
- In your experience, do landlords normally live in Pumwani? Are they regarded as being from Pumwani?
- Is there any difference between people owning and people renting? Do they socialise together? What is normally the relationship between owners and tenants?
- Is collecting rent difficult? What can be difficult? Are rents low or high? Are there differences in rent between areas in Pumwani? Are there differences in how much money people have within Pumwani?
- Is right of tenure an issue you feel is important?
- Can you say anything about the problems surrounding paperwork/titles in relation to owning property? Are there any problems in relation to paperwork that is specific for Pumwani? Could you sell your property if you wanted to? Can your next of kin inherit your property?
- What properties do Nairobi City Council or the Government of Kenya own in Pumwani?

**Space and trade (LR-L/LR-H)**

- Have you altered your building to accommodate for rental units?
- Is the building your own suitable for rental units?
- Would you have altered things if you could?
- Is your building suitably located for renting out rooms (near road/in alley/close to somewhere specific)?

**Building and construction (LR-L/LR-H)**

- In your experience, what kind of building materials are best suited for houses here in Pumwani?
- Do people in Pumwani follow building regulations and codes when building? Is this important?
- In your experience, how important is it that a building looks nice? Is it more important that the building looks nice, or that it follows building codes?
- In your experience, do people have building permits when they build?
- Who issues a building permit?

**Relationship to local authorities (LR-L/LR-H)**

- How often do you have to deal with local authorities?
- If you have a problem or a dispute (regarding your house/courtyard/stall), is it best to resolve this through local authorities? Or do you take your case elsewhere?
- Who do you think is best at resolving issues in your neighbourhood? An NGO/CBO? Local authorities? Someone else?

**Other questions (LR-L/LR-H)**

- Are most landlords in Majengo people that have lived there for a long time?
- Does ownership often change?
- Do landlords tend to own more than one building?
- Is investing in property more lucrative in Pumwani than in other parts of the city (especially the ones further away from the city centre (e.g. Kayole, Dandora)? Are properties in Pumwani valuable today? Are property values increasing? Is Pumwani an interesting area to invest in? Are you considering selling?
- How would you consider municipal services in Pumwani compared to other parts of Nairobi?
- Are you familiar with the development schemes in Pumwani in 1968, 1987 or 2002? What happened as a result of these schemes?
- There are 250 plots in Majengo, with 120 extensions. Are these considered legal? Are new extensions being built illegally? Is there strict control in such matters? Is it possible to build more in Majengo, or is the area saturated? Are there other places in Pumwani where there is potential for extensions and infill?
- How do you think Pumwani should develop?

## Appendix D

### SECOND INTERVIEW GUIDE

**Identifying groups according to socio-economic group**

Through interviews and transect walks respective class based groups will be able to provide information on four separate subjects: aspirations, problems and issues, assets, and conditions. The point of these interviews is to:

- Understand the differences between groups and validate the assumptions concerning what defines the respective groups.
- The 'driving forces' behind groups and how they relate to Pumwani.
- The dynamics between groups and how these dynamics affect Pumwani.

Possible connections then need to be made between transect walk/interview findings and the 'root causes' to issues particular to Pumwani, such as the reason for houses being in the state that they are, why there is a stronger sense of unity in Pumwani than elsewhere in Nairobi, why Pumwani has not yet been demolished, why landlord – tenant relations are more benign than many other places in Nairobi, why people want to retain the existing physical structures in Pumwani despite the condition of the housing stock, and so forth. The following is thus, based on initial interviews and previous research, a list of possible interview groups:

- Landlords as businessmen and political and religious figures (the bourgeoisie)
- Middle class businessmen/entrepreneurs (landlords or not)
- Landlords as homeowners (lack of business aspirations a result of a historic gender based divide?)
- Entrepreneurs with middle class aspirations (traders, stall owners, front porch duka owners, etc)
- Small scale entrepreneurs with or without employees.
- Tenants with middle class aspirations (office employees, clerks, educated, teachers, clergy, etc.)
- Proletarian tenants (temporarily unemployed, informal sector workers, licensed hawkers, craftsmen)

**Mapping aspirations**

By *mapping aspirations* I mean to attempt a mapping of the aspirations and ambitions of different groups. These may be achievable as well as unrealistic. It describes in which direction various groups in Pumwani are attempting (or

aspire) to move. The method applied in order to map aspirations is as follows:

- A description of initial ideas, hypotheses, and initial findings will be given.
- Based on initial findings regarding aspirations in Pumwani, the method applied will be evaluated and altered to better match findings.
- Any possibilities of using visualisation (maps, diagrams, animations) will be investigated.
- (Altered) methods will be applied to case in order to extract more information.
- Findings will be presented and the limitations to the method will be discussed.
- Throughout, issues pertaining to history, scale, and social class will be addressed.

#### *Aspirations and ambitions – General*

What are your aims and ambitions in life? What do you aspire to be?

Are these realistic – or do you feel they are too ambitious?

Do you feel you have achieved some of these ambitions?

Have you altered some of your aims and ambitions in order to achieve them?

Does the nature of your aims and ambitions have anything to do with you coming from Pumwani?

Do you feel that people coming to Pumwani have achievable ambitions? Do these people keep or change their ambitions once they come to understand Pumwani?

Would you say that the ambitions you have are common to your **group or to people with your vocation**? If so, would you say that this groups or vocation has had such ambitions for a long time – or have they changed over time?

Would you say that different groups in Pumwani have common ambitions that are different from other group's ambitions? If so are the groups ambitions related to one another – or do they differ from one another? Are there opposing ambitions? Which groups are most likely to have their ambitions realised?

Is it more important to have aims that are ambitious – so that you have to apply yourself? Or is it more important to have aims that you know you could possibly reach?

If you have ambitions that you feel you cannot reach – can you speculate as to why you cannot reach them?

If there are aims you have reached – could you speculate as to why you

haven't attained them? Are there any outside forces outside of your control that have helped or hindered you in achieving your ambitions?

Can anyone in power help you achieve your ambitions? A businessperson? A political figure? A religious figure? An elder? Have you joined in a group to try to achieve a common ambition?

Is there any physical evidence of your aims and ambitions, like a house, a furnished room, a car, a workforce, some produce? Can your aims and ambitions be pinned down on a map – or perhaps be visited through a walk?

Would you say that your aims and ambitions (or the fruits/results of your aims and ambition) are connected to Pumwani, or are they also connected to other places in Nairobi or in Kenya?

#### *Voting history – General*

What are the political inclinations of respondents, and can such inclinations be seen as general for specific classes?

Are political inclinations connected to aspirations and hopes? Or are political inclinations brought about by previous disappointments?

How would you describe a perfect politician? Would this description differ from descriptions of today's politicians?

Does voting, and who is in power mean anything for how things are in Pumwani? For business? For household related issues (price of food, rent, electricity, water)? For other aspect of life (education, social life, involvement in groups)?

Does voting, and who is in power mean anything in terms of how you relate to the rest of Nairobi (movement, infrastructure, transportation, being from Pumwani (stigmatization, being "poor" in richer parts of town)?

#### *Aspirations for family (if not brought up earlier) – General*

What are your aspirations for your family – for your wife, daughters, sons, mother, father?

How will you try to ensure that your hopes for your children will be met?

Is the future a good one for your children?

Do you think that your parents have higher aspirations than what you have today?

#### *Aspirations for community (if not brought up earlier) – General*

Do you have any aspirations for your local community? For your neighbours? For your "village" (e.g. Sofia, Digo)

If yes, how do you work for these aspirations to be met?

Is there any organisation that works towards achieving these or similar aspirations on behalf of the community? Have any of these aspirations been achieved through organisation work?

#### *Class distinctions*

Are the respondents class-conscious? Are some interview groups more class conscious than others? Can respondents attempt to identify classes? Would they be described as relational or tiered? Which class/group other than their own are they mostly in contact with? How would they describe such relations? Would they be described on basis of social standing or occupational standing?

#### Mapping problems and issues

By problems and issues I mean what problems the various groups see as pressing, be they small or big, that are common to life in general – or hinder groups from attaining their aspirations.

#### *Problems and issues – General*

What do you see as the greatest problems that you are facing? Are these current problems? Or have they been so for a long time?

Do you see other people struggling with the same type of problem?

If yes, would you consider people having the same type of problems as a group (e.g. tenants, e.g. traders, e.g. jua kali workers)?

Could you speculate in whether there are other groups that face other kinds of problems? If so, what kind of problems are these?

Do you think you are better able to handle your problems on your own – or are you better equipped to handle them as a group? Do you think these problems can be resolved at all?

#### *The others*

View of other 'troublesome' groups... Groups generally seen as problematic to the area (prostitutes, criminals, loiterers), as well as other classes that are in direct conflict with the class the respondents belong to.

#### *Social Mobility*

To what degree is there mobility - upwards or downwards in Pumwani? Where is this impossible? What are the buffers? Are such hindrances and buffers seen as being brought about by social stigma, or are there legal or judicial parameters that hinder mobility as well?

#### *Physical Mobility*

Is coming from Pumwani a problem in relation to physical mobility? Would you say that you are free to move wherever?

#### Mapping assets

By assets I mean (or Dfid mean) the various social, physical, cultural and political connections, relations and networks that the group in question belong to, rely on in every day life and can draw on in order to mitigate or solve problems that arise.

#### *Assets – general*

- *Human assets*

How many are you in your family? Is it a core family or do relatives live with you? How important is the family in Pumwani? Are persons within the family regarded as equal? Is income divided equally? Is there a gradual decrease in sharing depending on closeness of family bond/relation? Can family also be seen as a hindrance and a burden?

What kind of human assets are you in possession of? What is your background? What kind of skills do you have? What about in the household? In the business? In your employees/staff? Has your access to human assets changed over the years?

- *Natural assets*

What kind of natural assets do you possess? Land? Vegetable garden? Common or shared grounds? Football pitch? Trees? Is this affected by seasonal change?

- *Physical assets*

Housing (including drainage, electricity), transportation (including roads), tools, furniture, machines (phones, computers and internet connection), inventory. Their condition and usability.

Do you own or rent the house you live in?

If you own – how many structures do you own? Which ones are houses and which ones are extensions?

If you rent – how many rooms do you rent and how many stay in the rooms?

How reliant are you on your physical assets? Do you use them mainly for private purposes, or are they business related?

Do you share with others?

Do you own a computer? Are you able to borrow one? Do you use it regularly? What do you mostly do with your computer? Is it required for work – or is it also a leisure activity? Do you have a smart phone? Do you use your mobile phone or computer to access social media sites? Do you use them regularly? Are your connections mostly in Nairobi? In Kenya? Elsewhere? What do you think of the Internet connectivity/speed?

Would you say that your physical assets – and your use of physical assets – are common to others than yourself? Would you consider those as belonging to the same group as yourself?

- *Social assets*

Taken to mean networks and connectedness, membership in organisations or groups, relationships of trust, reciprocity and exchange (DFID). There could be distinctions made between social and political assets.

What kind of social group do you belong to? Who are your closest friends? Who are your business partners? Who are your clients or patrons? Do you consider yourself as having a large network of friends and acquaintances? Do you distinguish between groups of friends (private) and acquaintances/associates (work)? Do you make use of these connections when you are doing business? When you are having difficulties?

Do your friends and acquaintances make use of you for business? To solve problems? Would you say that tending to your friends and acquaintances is important in order to business (would you be able to do business without being “connected”)?

Do your connections have any bearing on whether or not people see you as an important person? Do you feel other people have the same relations to their social assets? Would you consider yourself as belonging to the same group as such people?

- *Financial assets*

What is your monthly income? Do you consider it to be regular or irregular? If irregular, would you say that this is a problem?

What do you spend your income on (make rough distinctions)? Would you say this is normal income and spending for someone in your situation? If yes, would you see yourself and others with the same income/spending as belonging to the same group?

How much rent do you pay as a landlord/tenant (of not answered already)?

### Mapping conditions

By conditions I mean the state of surroundings that the group in question bring out as important.

#### *Physical aspects*

##### *The house*

Describe the house you are living in. Has it been in its current condition for long? Has it been renovated? How would you consider the standard of your house compared to other houses in Pumwani? What about compared to elsewhere in Nairobi?

How does it hold up during the rains? What about the heat or cold?

Do you feel that the security situation is adequate (is the house secured well enough)? Is there any need to be worried about security?

Do you have trouble with vermin, bugs, mosquitoes or other unwanted presence?

Do you consider your house habitable?

##### *The neighbourhood*

Describe the neighbourhood you are living in. Would you say that the neighbourhood has a particular quality to it? In terms of how well maintained it is? Are there other characteristics in the neighbourhood that are defining?

How would you describe the infrastructure in the area (if not touched upon previously) – roads, drainage, electrical supply, lighting,

What is the condition of the area during the rains?

Other amenities in the area? Bars? Hotels? Dukas? Are they important places for the neighbourhood? Do you use these amenities regularly? Do the same people gather in these places? If yes, would you be able to describe these types of groups?

##### *Common or communal areas*

Play areas for children? Formal places to gather to discuss? Other places to gather to socialise? Do you use these regularly? Are they important places to the neighbourhood? Do the same type of groups gather in this area? What kind of groups are they?



*Ownership issues*

Are there landowners in Pumwani?

Are there extension owners in Pumwani – or do all extensions belong to the houseowners?

Imagining interventions

This section explores the kinds of interventions implied – both strategic and practical – by imagining what they would be like based on the previous findings. The imagined results – both intended and unintended will be sought described through a ‘what if...?’-type exercise. The intent of this section is not to decide on which interventions should be applied, but rather to use this imagining of interventions as a basis for determining the plausibility of the findings (in other words: does the method work?) The main investigation will focus on how interventions would possibly disturb social relations, how they influence politics, cultural issues etc. By re-categorising issues under different headings (culture, politics, social issues, physical, economical, etc), the versatility (and shortcomings) of the previous method may be easier to gauge.